The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 456.—Vol. XIV.] LONDON: SATURDAY, MAY 18, 1844. [Price 6d.

MINE MATERIALS.—FOR SALE, BY AUCTION, on Wednesday, the 22d inst., by Two o'clock in the forenoon, at Wheal Unity-near Redruth, the following VALUABLE MINE MATERIALS—viz., TWENTY 20-inch 9-ft. PUMPS; EIGHTEEN 9-inch 9-ft. DITTO; also SMALLER PUMPS, down to 10-inch; sundry windbores, working barrels, plunger-poles, door-leves and doors, 9-pieces and doors, &c.; capstan and shears, large balance-bob, for 16-ft. to 21-ft. water wheels, with two pair stamps' frames to each, two excellent drawing machines, cast iron axle, for large water-wheel, stamps' axle, for 12-head stamps, machine lifters, beam and straps, weights, old iron, saddles, frames, sieves, barreling house tools, &c.; wood sheds, lavatory, counting house furniture, and various other articles.—Further particulars may be known on application to Mr. R. A. Crouch, Liskeard, or to James Mitchell, auctioneer, Little-he-side, Gweenap. Dated May 6.

IMPORTANT SALE OF OAK TIMBER.—TO TIMBER MERCHANTS, CONTRACTORS, BUILDERS, WHARFINGERS, and others.—JOSEPH GOODWIN, auctioneer, &c., begs respectfully to inform his friends and the public that, in consequence of the forwardness of the season, it is found necessary to fell the timber in BALNEY WOOD, advertised to be sold, by auction, on Thursday, the 9th of May inst., and that the SALE is POSTPONED UNTIL THURSDAY, the 30th inst., and following days (if necessary), when the same will BE SOLD, BY AUCTION in convenient lots, TOGETHER WITH LOP AND TOP, particulars of which will appear in catalogues in due time.

*** Three months' credit will be allowed to purchasers of £10, upon paying £20 per cent. deposit, and giving satisfactory security for payment of the remainder.

BALNEY WOOD is in the parish of HANSLOPE, BUCKS, an old half a mile distant from the London and Birmingham Railway and Grand Junction Canal, which will be found a great advantage to purchasers.

On account of the great number of lots, the auctioneer requests the company to meet him at Mr. SODEVE, the PEAHEN INN, Castle Thorpe, punctually at Ten o'clock in the morning, and proceed from thence to the place of sale.

Newport Pagnel, May 1.

VALUABLE TIN MINE AND MATERIALS FOR SALE.—TO BE SOLD, BY PUBLIC AUCTION, in One Lot, on the MINE, on Monday, the 3d day of June next, at Three o'clock in the afternoon, all that valuable and productive TIN MINE, called WHEAL ANN, situate in the parish of Wendron, in the county of Cornwall (worked on the same lode as the well-known and lucrative Wheal Trumpet Mine), together with the MACHINERY, MATERIALS, and EFFECTS, comprising ONE 48-inch cylinder STEAM-ENGINE, with five boilers; ONE 6-inch cylinder WHIM-ENGINE with capstans, shears, and sheaves, engine rope, whim chain, 7, 8, 9, and 10-inch rods and plates; a quantity of 5, 6, 7, 8, and 9-inch pumps, with H pieces, clackboxes, windbores, brass and other working pieces; several plunger poles, 100 fathoms of transomed iron, smiths' bellows, anvils, miners' tools, a quantity of iron and timber, and a variety of other useful mining materials.

This mine and materials are offered for sale by and under the directions of the executors of the late Thomas Teague, Esq., deceased, and will be found well deserving the inspection and consideration of parties interested in tin mines, and of the public generally; and the monthly returns of tin are of considerable importance, and might be much increased.

Parties desirous of viewing the premises are requested to apply to the agents on the mine; to the auctioneer, Mr. Nicholas Trevena, Redruth; and for further particulars, to H. T. Smith, Esq., solicitor, Devonport; or to Messrs. Simmons, Passing-ham, and Simmons, solicitors, Truro.—Dated Truro, May 1.

IMPORTANT TO IRONFOUNDERS AND OTHERS.—TO BE LET, and may be entered upon immediately (either by lease or otherwise), a NEWLY-ERECTED, well-arranged, commodious, and very complete IRON FOUNDRY, capable of turning out from 40 to 50 tons of castings per week; the air furnaces, cupolas, cranes, stoves, pits, pipe boring and blowing apparatus, and other conveniences, have been studied (regardless of expense), with a view of getting up work at the least possible price.

The premises are by the Birmingham Canal, very conveniently situated, and within 100 yards of the turnpike road leading from Birmingham to Dudley.

For particulars, and to treat for the same, apply to Mr. E. Whitehouse, Bloomfield, Tipton; to Messrs. Whitehouse and Burton, solicitors, No. 6, Chancery-lane, London (where a plan of the property may be seen); or to Mr. William Johnson (late of Hornsby Ironworks, Tipton), No. 19, Moorgate street, London.

To view the same, apply at the Limerick Iron Green Bridge, Tipton.

TO BE DISPOSED OF, A COPPER MINE, with WATER-POWER, GREAT EXTENT, and other advantages, which are imagined to still remain known. Also a SLATE QUARRY, in which the slate is of an excellent quality, in the neighbourhood of Portmadoc; the facilities of working and of carriage to a seaport are great.—Apply (prepaid) to Mr. James Evans, Llanystumdwy, Denbighshire, North Wales.

TO BE LET, and immediate possession given, the SILVER AND LEAD MINE at RINGABELLA (near Cork).—These mines are now in early well circumstanced—the adit level coming out on the Strand, where large ships are loaded.—Further information may be obtained on application to Mr. R. English, 5, Shorter's court, Throgmorton-street, London.

TO CAPITALISTS.—TO BE DISPOSED OF, a very valuable RIGHT TO WORK, for a term of years, SOME of the most desirable MINERAL MINING PROPERTY (containing veins of coal and ironstone), in the immediate neighbourhood of Pontypool.—For particulars and price apply to Henry Ling, Esq., solicitor, Norwich; or to Mr. F. Harrison, solicitor, 5, Bloomsbury square, London.

TO COALMASTERS.—TO BE LET, or SOLD, on moderate terms, the GRAND-CAR-GURNEY ANTHRACITE COLLIERY, consisting of about 70 acres of minerals, situate in the county of Glamorgan. The coal may be opened on this big vein, which proves of excellent quality, and is in full working order. The shipping port is Llanelly, to which there is access by a good turnpike give railway.—For further particulars apply to Mr. J. Evans, 1, Queen square, Bath.

THE COLLIERS' STRIKE.—In ANSWER to the following ADVERTISEMENT, which appeared in the *Independent* on Saturday last, the Subjoined:—

"An advertisement having appeared in the *Independent* of last week, issued by Mr. W. Newbould, we hereby contradict the assertions therein absolutely. Instead of 10s. to 20s., say 12s. to 16s. weekly, of twelve hours daily—some of us to worse. Mr Newbould also wants to share his moderate contract to be 4/., and now 6/6. The public may fairly rely on the truth of this statement.

"Intake, near Sheffield, May 5, 1844. The Committee of Hewers.

"N.B.—In reference to the delegate, Mr. Newbould stated, that he had only worked one year in the pits. We say, he has worked nine years in the pits."—By reply is, that a man who has been employed for twenty-seven years at the colliery, and was a pit woodman, or datteller, at 18s. per week, in February, 1842—two years, at his own request, to a coal getter or collier—was paid £1 12s. on the 6th of January, 1843, as wages for himself and his three sons, of twenty, eighteen, and fifteen years of age, employed as filers and hurriers; the wages paid that week to other persons in the same employ, by the coal getters, was for five days' work only. A pit woodman, employed for thirty-two years, was paid for himself (three wages, 7s.) and four sons, of twenty, nineteen, seventeen, and ten years of age, employed as filers, hurriers, and braggers, a total of 40s 9d.; the wages paid for five days' work, same as above, by the coal getters. I pay all datal persons for six days, minus colliery: if work during the day. The filers' wages, per my quarterly return, was for July, 1843, and on the 6th of January, 1844. What proportion is or a collier has to work known to himself—I am not aware.

The coal getters profess to work only eight hours of the wheel, unless nothing else on hours, and more frequently only six or less. The working in water could be very little, as I have seen only a small quantity of wet coal drawn out of the pits; if it occurs the falling of the upper bits a water could, the colliers had no right to do it, being only the work of labourers or yonkers—and a short time since, I the changed the putting from contracting to do that work.

The rent of my houses is, for the best new stone room, 1s. 6d. per week each; for the four new brick ones, 1s. per week; with a large garden to each, much less paid for the rents. The rents of the other houses are 1s. 4d., 1s. 2d., 1s. 0d., and 1s. 1d. per week each, with gardens. But some of the houses are all rentless.

The "delegate" alluded to was employed one year at my colliery—namely, in 1837; but my storekeeper does not know that he ever followed the occupation of a collier one year; he occupied one of my houses prior to leaving my employment, in April, at the rent of 1s. per week. I may state, also, that all the colliers were at present held illegal possession of their houses and gardens.

Intake Colliery, May 10. WILLIAM NEWBOULD.

WANTED, at the INTAKE COLLIERY, near SHEFFIELD, A FEW STEADY COLLIERS, not connected with the Union, to supply the situations of those who left their employment, at wages from 18s. to 20s. per week, on Saturday, 4th inst. Although the hands leaving are the only men reported to the Government Colliery Inspector, to exist, as coal getters, whose average period of employment was twenty-two years—viz.:

One Man—50, 50, 50, 47, 30, 28, 25, 24, 22, 7, 6, years each.
Two Men—50, 50, 50, 50, 50 years each.
Three Men—47, 30, 30, 14, 12 years each.
One Man—1 year (now a delegate).

Fifteen coal hewers not included.

Any collier may judge for himself of the pecuniary comforting state of the men, and the hardships and vegetation they have endured, when he is informed, that they have had of a no-rentals coal a house and garden over the colliery land—and all the colliers have worked for the same past upon a hewer's notice from either party, and have never known that should such work they only to

* Those colliers are now at work and reconciled with the Union.
† Apply to Mr. William Newbould.—May 4.

ASSAYING.—IMPORTANT TO THE PROPRIETORS AND SHAREHOLDERS OF MINES.—ASSAYS of LEAD, COPPER, IRON, TIN, MANGANESE, and all other ores, are conducted by Mr. MITCHELL, assayer to the Royal Polytechnic Institution), No. 5 A, Hawley road, Kentish Town.—N.B. Gentlemen instructed in assaying and general analysis.

ABERDEEN HARBOUR.—TO CONTRACTORS FOR WORKS.—The PARLIAMENTARY COMMISSIONERS for the IMPROVEMENT of the HARBOUR of ABERDEEN are desirous of RECEIVING TENDERS for the EXECUTION of certain WORKS, viz.:—The CONSTRUCTION of a LOCK, and also of an ENTRANCE, with a single pair of gates, with the necessary WING and RETURN WALLS, SWIVEL-BRIDGES, GATES, GEARING, &c.; the TAKING DOWN, REBUILDING, and EXTENDING certain QUAY WALLS; the EXCAVATING, DREDGING, and DEEPENING of a portion of the HARBOUR; and the CONSTRUCTION of certain SEWERS or CULVERTS, with the necessary CHECK SLUICES, TIDE VALVES, &c., all agreeably to plans, sections, and specifications, made out by James Abernethy, engineer to the Commissioners, which may be seen at his office, 93, Waterloo-quay, any day after the 1st of May next, between the hours of Ten and Six.

Sealed tenders, a form of which will be furnished by Mr. Abernethy, addressed to "The Aberdeen Harbour Commissioners," to be delivered at the Town House, Aberdeen, on or before the 5th day of June next, at Twelve o'clock noon.

The Commissioners do not bind themselves to accept the lowest tenders, and further reserve to themselves the power of rejecting all tenders which are not satisfactory. Two approved sureties, at least, will be required for the due performance of the works; and their names and designations must be given in with the tenders.

By order, JOHN ANGUS, Clerk to Commissioners.

Town-house, Aberdeen, April 29.

*** Separate tenders may be given for the sewers or culverts.

PATENT IRON ROOFING, the CHEAPEST & STRONGEST EVER MADE, which will be put on any BUILDING, and COVERED with SLATES, at an ALL A COST as a TIMBER ROOF can be furnished and slated.—Specimens may be seen at the Oak Farm Works, near Dudley, and particulars and prices obtained from them upon application, or from Messrs. Bailey and Pegg Bank-side, London.—Also PATENT ROLLED FIELD GATES, in which all the joints are welded together, and MADE of WROUGHT IRON, equally strong both ways, may be had, in numbers of not less than ten (for cash), from 5s. upwards. These may be had upon application to the Oak Farm Works, or through Messrs. Cottam and Hailes, ironmongers, &c., Wineley street, Oxford-street, and Cornwall road, London, where specimens may be seen.

*** Names of dealers in provincial towns will be advertised hereafter.

IRON, TIN PLATES, WIRE, &c.—WILLIAM FOX, METAL BROKER, No. 7, MANCHESTER-STREET, LIVERPOOL, OFFERS HIS SERVICES TO THE PURCHASERS OR SELLERS OF IRON, TIN PLATES, OR WIRE.—From his knowledge of the trade, and extensive connection with the principal merchants, manufacturers, and dealers, he is enabled at all times to put any one, favouring him with their commands, in the best possible position as buyer or seller. W. Fox's charge of brokerage is 1 per cent. upon transactions above £1 0s., under that amount 1 per cent., payable only by the seller.

RAILS.—FOR SALE, about 3200 lineal yards of WROUGHT IRON T RAILS, 35 lbs. per yard; and 1200 CAST IRON CHAIRS, lying at Newport, Monmouthshire; the rails and chairs have been somewhat used some time, but have rarely been used. The total weight about 800 tons, and the price for the rails 6l., and for the chairs 5l. 10s.—net cash, free on board.—Apply to Messrs. W. Bird and Co., 5, Martin's-lane, Cannon-street.

IRON AND ANTHRACITE COAL COMPANY.
Capital £75,000, in 15 shares, of £50 each.

The distinguishing features of this concern are—

1. That the landed and mineral property of the company will be worth the whole capital which is proposed to be invested, and the surface and royalty rents alone will yield a fair interest thereon.

2. That an immediate prospect exists of large and permanent profits from the works, more especially as all the estimates were made previous to the late rise in the price of iron, and have been recently fully tested by competent and disinterested persons. One half of the shares are already appropriated.

Applications for prospectuses, &c., may be made to Messrs. Sawyer and Bottrell, solicitors, Maple Inn, London, where the plans, estimates, and rules for the management of the company may be seen.

LANIVET CONSOLS MINING COMPANY.
Capital £10,240, in 2048 shares, of £5 each.—Deposit £1 per share.

DIRECTORS.

William Abbott, Jun., Esq.	G. H. Hoppel, Esq.
John Edwards, Esq.	James Wyld, Esq.

This valuable COPPER MINE, situate near Lanivet, in the county of Cornwall, is in full working order, with powerful steam engine and adequate machinery—working regularly increasing returns, and offering prospects of a superior description. The proprietors will DISPOSE of ONE THOUSAND SHARES, on which a deposit of £1 each will be paid, to form a fund for extending the operations; and the amount then raised will, it is confidently expected, suffice to bring the mine into a permanently productive condition; but should further calls be required, all the shares will be alike subject thereto.

Prospectuses may be obtained from the secretary, Mr. Henry Thomas, 6, Grange-yard, Lombard-street, to whom applications for shares is to be made.

*** Specimens of the ore may be seen, and prospectuses and rules obtained.

ALTEN MINING ASSOCIATION.—Notice is hereby given, that the GENERAL ANNUAL MEETING of the shareholders will be held at the office of the association, 9, Inverness-terrace, 7, Old Bond-street, on Thursday, the 30th day of May inst., at Twelve for One o'clock precisely, for the purpose of receiving the report of the directors, and a statement of the financial affairs; also to elect two additional directors.—The accounts will be at the offices for inspection of the shareholders two days previous to the meeting.—Dated this 6th day of May, 1844. By order of the board, EDWARD J. COLE.

COMBMARTIN LEAD AND SILVER MINES, near BARNSTAPLE, Devon.—TO BE SOLD, DOUBLE BARGAIN, FIVE SHARES in the ABOVE FLOURISHING CONCERN, the property of a gentleman about to leave the country.—For particulars as to price, apply personally to Mr. W. H. Thorne, grocer and tea dealer, 3, High street, Barnstaple.—Dated May 6.

CONSOLIDATED TRETOIL MINING COMPANY.—The directors hereby give notice, that all SHARES whereon the call of the 1st March last, remains UNPAID are liable to FORFEITURE, and unless the amount of such call be paid on or before the 1st June next, the same will be forfeited accordingly. Certificates for shares issued for 5/6 (the office to have the payment of the call credited thereon). By order of the board,

Consolidated Tretoil Mining Office. S. BURTON, Secretary.
4, St. Mildred's court, Poultry, May 15.

PATENT OXY-HYDROGEN FURNACE FOR STEAM-BOILERS, LOCOMOTIVE-ENGINES, RAILWAY COPPERS, and other purposes, COMBINING the two important desiderata, GREAT ECONOMY OF FUEL, AND TOTAL ABSENCE OF SMOKE.

SWAYNE AND BOVILL,
MILLWALL, POPLAR, AND 15, ANGEL-COURT, LIVERPOOL-LANE, CITY,
Engineers and Patent Steam-Boiler Railway and Locomotive Manufacturers, have been appointed AGENTS for EYMER'S PATENT OXY-HYDROGEN FURNACE, by the use of which, from various months' experience with steam-vessels and other furnaces fitted on this principle, they can positively state that a SAVING OF THIRTY PER CENT is effected over any of the best constructed furnaces hitherto constructed. This furnace is designed for burning anthracite, or mixed coals, which has long been adopted by engineers and scientific men to be by far the most powerful fuel (containing upwards of 40 per cent. of pure carbon), but, until the introduction of this furnace, the effectual application had been a matter of much difficulty, as to prevent the escape of smoke. These difficulties have been entirely overcome by a simple construction of the grate and fire bars, by which steam is passed through the fire, generating a protective and combustive gas formed by the action of oxygen, hydrogen, and the caloric contained in the steam, the elements which produce, with the lowest fuel, the most intense heat known—but the effects of which are here prevented by diffusion through the mass of the latter. The arrangement also prevents the grate bars, preventing clinkering, and burning little or no ash.

For further particulars apply as above, where the cost of furnaces, &c., will be given, and also information respecting authenticated testimonials which may be had in London at the place of any guard steam-boat.

OFFICE FOR PATENTS OF INVENTIONS AND ASSIGNMENTS OF PATENTS,
No. 14, LINCOLN'S INN FIELDS, LONDON.

INVENTORS and CAPITALISTS are informed, that an ACT—5 & 6 Vict., cap. 100—for REGULATING and SIMPLIFYING the PRACTICE of OBTAINING and SECURING PATENTS, preparation of APPLICATIONS, and DRAUGHTING OF INVENTIONS, is incorporated with many amending and clauses.

REGISTRATION OF DESIGNS.—Under the new Act, 5 and 6 Vict., chap. 65, REGISTRATION OF DESIGNS of articles of utility or ornament, may be granted to the same kingdom for three years, at a small expense. Unregistered designs may also be registered under the Act 2 and 3 Vict., c. 17.

A prospectus, with full particulars as to the manner to be pursued, and the expenses, &c., of taking protection, either by Letters Patent or the Registered Acts, may be had gratis, upon application personally, or by letter, to Mr. Alexander Bloom, 14, Lincoln's Inn fields, London.

JACKSON S. STEVENSON, BILL AND SHARE BROKER,
PIAZZA, COMMERCIAL BUILDINGS, BELFAST.
AGENT for the Promoters' Life Assurance and Annuity Company of London.

TO CHEMISTS, COLOUR MANUFACTURERS, MINERALOGISTS, and OTHERS.—TO BE SOLD, the UNEXPIRED TERM of the LEASE of an old established COLOUR MILL, in full trade, with an extensive mineral royalty. The property is situate in the most romantic part of Derbyshire.—For particulars apply to Messrs. Milnes and Newbold, solicitors, Matlock Bath, Derbyshire, or to Mr. Geo. Hendrey, colour merchant, 38, Maunsell-street, London.

STEAM TO INDIA VIA EGYPT, MALTA, ITALY, ALEXANDRIA, AND THE PENINSULAR PORTS.

PASSAGE TO BOMBAY, MADRAS, AND CALCUTTA.

The Peninsular and Oriental Steam Navigation Company's steam-ships START FROM SOUTHAMPTON THE FIRST OF EVERY MONTH, arriving at Alexandria about the 15th. The Hon. East India Company's steamers leave Suez for Bombay about the 22d of the month, and for Madras &c. Calcutta the Peninsular and Oriental Steam Navigation Company's steamers, *Hindostan* and *Bentinck*, or Government steamer. The Peninsular and Oriental Steam Navigation Company have now a steaming on the Mahmoudieh Canal, and other great improvements have lately been introduced into the transit through Egypt.

STEAM TO MALTA, ITALY, &c.

A steamer from Southampton leaves the first of every month for Malta, whence are steamers to Naples, Genoa, Civeta Vecchia, three times a month.

STEAM TO OPORTO, VIGO, LISBON, CADIZ, AND GIBRALTAR.

A steamer leaves Southampton every Thursday at 3 p.m. for the above places.

Apply at the Peninsular and Oriental Steam Navigation Company's offices, 31 St. Mary Axe, London, where only passages can be secured throughout.

STEAM.—DISCOVERY FOR REMOVING AND PREVENTING THE INCRUSTATION UPON THE BOILERS OF LOCOMOTIVE AND STATIONARY STEAM-ENGINES, WITHOUT INJURY TO THE METAL.—The ADVANTAGES which this discovery presents, are, amongst others,

FIRST.—The preventing the adhesion of calcareous and ferruginous salts to the surface of the tubes and boiler, without causing the slightest injury to the metal.

SECOND.—Economy in fuel.

THIRD.—That ANY KIND of fresh water may be used, without regard to its purity or quality.

FOURTH.—Economy of time in cleansing the boiler.

Railway and other companies, and private individuals, desirous of availing themselves of this discovery, may ascertain full particulars, and the experiments made, by communicating with Messrs. Ploniger and Permanent, Gray's Inn, London.

TO ENGINEERS, MERCHANTS, IRONFOUNDERS, SHIPPING AND ENGINEERS, RAILWAY AND CANAL CONTRACTORS, SURVEYORS, ARCHITECTS, BUILDERS, MINE OWNERS, AND OTHERS.—Mr. WILLIAM JOHNSON (upwards of twenty years with the late Hornsby Coal and Iron Company), in small commences, respectfully announces to his friends, and the friends of the late firm, that he has commenced COMMISSION AGENT, and has taken offices at No. 28, MOORGATE STREET, CITY, and having the assistance of, and connected himself with, gentlemen of thorough talent, he is prepared to assist them in designing, estimating, and valuing property of any description; in procuring either condensing or non-condensing steam-engines, boilers, and boiler appurtenances, sugar or corn mills, sugar pans and clarifiers, in cast or wrought-iron; mill cases, stripe plate or grooved; pond-, waterfalls, and other mill-wind work; also machinery for rolling mills for copper, iron, zinc, &c., with bars and mill, plain or grooved rolls for the same; water wheels, machinery for wire drawing, hydraulic and screw presses, steam drying cylinders, glazing, and other rolls, &c., for paper-makers; wrought iron steam boats, and boats for canal carriers; wrought iron cases in shells, cranks, crank heads, pulley rods, gudgeons, &c.; boiler plates, chain and bar iron, &c.; iron for railway wheels, railway axles, T and L iron, &c., for roofs, castings of every description for bridges, aqueducts, gas and water works, buildings, &c., &c.

Mr. JOHNSON begs to assure all those who may favour him with their commands, that a careful attention to quality and punctuality will be observed.

A REGISTER of all kinds of MECHANICAL and OTHER PROPERTY FOR SALE, &c., is kept.

Mr. JOHNSON is the PATENTEE, in connection with Mr. John Oliver York, of the IMPROVED MODE OF PAVING—consolidation of iron and wood, to which he invites the attention of commissioners, surveyors, and the iron and timber trades in particular.—MINING and OTHER PROPERTY SURVEYED, plans and reports made, &c.—PARTNER SHIP and BANKRUPTCY ACCOUNTS audited and arranged.

*** Unexceptionable references given.

ANDREW SMITH'S PATENT GALVANISED WIRE ROPE WARRANTED NOT TO OXIDISE FOR MINING, RAILWAY, AND SHIPPING PURPOSES.—The Royal yacht *VICTORIA AND ALBERT*, *PENELOPE*, *VIRAGO*, *HEBRUS*, and several other ships in the Royal Navy, as well as the Merchants' Service, have been FITTED WITH ANDREW SMITH'S PATENT WIRE ROPE; it is about half the size and weight of hempen rope and of a third stronger.—For particulars apply to Andrew Smith, 7, Upper Lisle-street, Cornhill, or, Princes street, Leicester square; or at the works, Millwall, Poplar, London.

R. S. NEWALL AND CO.'S PATENT IMPROVED WIRE ROPE is now in very EXTENSIVE USE in the MINING DISTRICTS, and in several of the PRINCIPAL RAILWAYS throughout this country. It is almost exclusively used on the Blackwall Railway, where it has been found superior to any other.

It is also used as the RIGGING of the *GREAT BRITAIN* steamer, of 3000 tons and other vessels.

It is one half the weight of hemp rope—of equal strength.
It is one sixth of the bulk.
It is cheaper first cost.
It has lasted as long as five hemp ropes, doing the same work on railways.

Specimens and testimonials may be seen, and every information as to the application, &c., will be given at the company's works, WHITEHEAD CROSS, TYNE.

TO ARCHITECTS, ENGINEERS, BOILER-MAKERS, BOAT-BUILDERS, &c.—NAPTHA BLACK VARNISH.—The Napthe Black Varnish, or Unexpressed Navy Varnish, will dry in two minutes, bearing no smell or stickiness. This varnish is used instead of paint, and, when mixed with one-eighth of boiled linseed oil, forms the best black coating hitherto invented, more particularly for iron, being both saleable and anti-corrosive. It is likewise recommended for rough work, such as iron tanks, furnace, trunks, canal tubs, carriages, and all such articles, as requires preservation from the effects of rust or weather.

Sold, in kegs, barrels, and casks, at 1s. per gallon, by W. H. LORD, chemist, Whitechapel, of whom may be had every description of naptha products ready for use.

TO ENGINEERS, RAILWAY CONTRACTORS, MINING AGENTS, IRONMASTERS, and OTHERS REQUIRING FINE GREASE for MACHINERY and AXLES of every description.—ADOLPH PERLITAUT'S IMPROVED ANTI-FRICTION GREASE is now taken on machinery and axles of any kind where movement friction is kept up—introduced to be the most useful, economical, and best preparation of the kind ever offered to the public.

A Reference to scientific and practical men can be given, and testimonials shown of the great advantage.—Samples forwarded on application at the manufactory Union street, Bishopsgate street, Bloomsbury square, London.

TO ENGINEERS, DRAUGHTSMEN, &c.—STEPHENS'S RULING AND MECHANICAL DRAWING INK, for ENGINEERS, ARCHITECTS, and DRAUGHTSMEN.—This article will be found superior to the best Indian ink for the above purposes. It does not corrode with India rubber, or wash off with water; it flows freely from the drawing pen, and never requires or corrodes it; it may be used on a plate of steel, with a camel's hair brush, allowing it each wash, of thirty-six hours to be drying, as required. It has the advantage of being ready for immediate use.—Used in corked stopped bottles, contained in four ounces each, and sold by bookbinders and stationers, at 1s. each.

SEYSSEL ASPHALTE COMPANY.—"CLARIDGE'S PATENT." ESTABLISHED 1838.

This ASPHALTE is a bituminous limestone, obtained from an inexhaustible mine at Pyrimont, in the Isère department. Previously to its introduction into this country, its value, the material had been used for many years in France, and, from its great utility, was extensively patronised by the Government of that country.

Among the various uses to which it may be applied, the following may be enumerated:—*Main Pavements*, public and other; for the thorough footpath in Blackfriars-bridge, Charing-cross, and Tottenham; the flooring of Exchange and other buildings; also of Lincoln's-inn and Hudson, King's-bench, Bow-bench, and Reading Prisons, Pentonville, Tothill-fields, and Westminster Bridewells, Portland Prisons, Tun rooms, and Exchange—for flooring, covering of arches and other bridges, the lining of underground culvert near Bow-bridge, to prevent the egress of the Fleet; also in forming the principal part of Wells, to prevent their being injured.—The specification of the Assistant of Cement is particularly recommended by the Commissioners acts of the Post Office.—Directions concerning the formation of the above will always be duly and regularly.—It is the exclusive Company, to supply to Docks, Breakwaters, or Wells built for the purposes to the accommodation of the sea; the laying of Docks, Pitch grounds, and other hydraulic purposes.

E. BRANDELL, Secretary. Offices of the Company's Works, "Claridge's Patent," Hungerford Stairs, London.

*** Country surveyors and architects desirous to be appointed for the sale and application of the Asphalte of Seyssel Mastic.

INSTITUTION OF CIVIL ENGINEERS.

MAY 6.—The Council, &c., &c., to the chair.

The paper read was an abstract by Mr. J. Samuda, Assoc. Inst. C.E., of the Atmospheric Railway. It commenced with the general principles of the system, describing it as a system of working railways in which the moving power is communicated by means of a continuous pipe or main, laid between the rails, and divided by valves into suitable lengths for exhaustion; a partial vacuum is formed in the pipe, by air-pumps, worked by machinery, at intervals along the line. Along the upper side of the main is a continuous aperture, which is covered by a leather valve, guarded above and below with iron plates, hinged on one side to the pipe, and bedding into a groove, containing a mixture of wax and tallow, on the opposite side, so as to close the aperture. A piston is attached at some distance in front of, and beneath, the leading carriage of the train, and, by means of a packing of leather within the main pipe, fits so as to be nearly air-tight. When a vacuum is formed in the main, in front of the piston, and in the direction in which the train is to travel, the air impinging on the other side of the piston, carries it forward with a velocity due to its pressure upon the area of the piston, which, being attached to the leading carriage, carries the train forward with it. The valve which covers the continuous opening along the main is opened by a frame and wheels, which precedes the carriage, and it is closed and sealed down as the train proceeds by a heater, which slightly melts the wax and tallow as it passes over it. The details of all these parts of the contrivance were then given, and were illustrated by a series of drawings. The paper then proceeded to notice the early attempts at using the pressure of the atmosphere for conveying goods and passengers—the projects of Medhurst in 1810, of Vallance (of Brighton), and others. It appeared that the first intentions were, to have exhausted cylinders of considerable area, within which the carriages should travel; but, as it generally was objected that the passengers might not approve of this mode of conveyance, through a continuous tunnel, means were devised for connecting the piston within the tube with the carriages travelling upon the rails outside it, and, after numerous attempts, Messrs. Clegg and Samuda succeeded in the system described, and which, after being tried for some time imperfectly at Wormwood Scrubbs, has been carried out practically on the line from Kingstown to Dalkey, near Dublin, a distance of one mile and three-quarters, up a series of inclines, averaging 1 in 115. It appeared that most of the previous attempts had failed chiefly because the continuous valve was defective, and that Mr. Clegg suggested the use of wax and tallow, which had been so successful as a means of hermetically sealing up the opening caused by the passage of each train. The manner of applying the power was then examined, and the adaptation of the electric telegraph, for giving the signals at the time for starting the engines, at periods along the line, was shown. The accumulation of power in the main, from forming a vacuum previously to the arrival of the train at each division, was shown to be proportion to the degree of vacuum which was formed. The duration of the various working parts was stated to be very small, and that on the Kingstown and Dalkey line it was scarcely appreciable.

The leakage of the valve, &c., was then examined, and it was argued that the power lost by leakage was inversely as the speed of the trains, for the faster the pistons passed along, the less time the pipe would be under exhaustion, and, consequently, the less time would the leakage exist. Experiments on the 15 inch main on the Dalkey line, showed that 5 horse power would be required to overcome the leakage of three miles of railway. The system was stated to be peculiarly applicable to such steep inclines, as, with locomotive engines, would be called bad gradients, for so long as the steepness of the inclines was not too great for the trains to descend without the use of the break, no power was lost, and the cost of working was no greater than on a dead level, for the whole of the additional power required to overcome gravity, while ascending the inclines, was restored in descending, particularly when the planes were of great length, and at a convenient inclination, in which latter case there would be a slight saving in working an undulating line. The safety from collision between the trains was much argued upon, and it was stated to be impossible for the trains to approach nearer than three miles to each other, unless at the stations expressly appointed for the purpose; single lines of railway could, therefore, be worked with safety. The cost of working was then fully examined, and taking the data the results of the expenses on the Dalkey line, and supposing the system to be adapted to a line of 112 miles long, similar to the London and Birmingham Railway, on which the cost of working with locomotives was stated to be per train per mile, for

haulage, 18d.; ditto, for maintenance, 9d.	The cost of working the atmospheric would be—per train per mile, for haulage, 4.44d.; ditto, for maintenance, 4.44d., with the additional advantage of travelling at a mean speed of fifty miles per hour, instead of between twenty and twenty-five miles per hour with the locomotive system. The discussion of the paper and upon the merits of the system was commenced, but, as the interest of it would be lost by giving it in a curtailed form, it is reserved until after the meeting of Tuesday, 21st inst., when the discussion will be resumed.

The papers announced to be read at the meeting of the 21st inst., were—"Account of the Plan adopted by William Preston White, for Raising the Sunderland Steamer now in the river Lee, near Cork, Ireland," by G. P. White, Assoc. Inst. C.E.—"Essay upon the Causes of Preventing, and Method of Determining the Amount of, Priming in Steam-Boilers," by R. Pollock.—"Description of a Coffer-dam used for Closing the End of the Building Slips at her Majesty's Dockyard, Woolwich," by B. Snow, Assoc. Inst. C.E.

THE PARAGON CAMPHINE OR SPIRIT LAMP.

Rarely, indeed, does it happen that the author of a new invention, however simple the same may be in principle, succeeds in the full development in the first instance, but either adds successive improvements himself, or, by the operation of ingenuity and perseverance, others perfect what he had begun; this general truism is more applicable to the use of camphine or rectified spirits of turpentine, for artificial illumination. It was long considered impracticable to apply this spirit in a lamp, the extreme volatility and combustible nature having rendering it extremely dangerous; and, as the appearance of the Vesta lamp, which, by a powerful arrangement of the cotton, admissive of air, and the insertion of a fine conductor of heat between the flame and the body of the lamp, was made to consume this spirit at a most trifling cost, yet giving a light equal to gas with perfect safety, it was hailed by the public as a desideratum in lamp economy; not, we believe, had a most unprecedented success, however, completely begun to find their way to the makers and the public eye; the glasses, in some instances, became covered with solid carbon, which was carried by the draft up the lamp chimney to all parts of the room, explosions were dreaded from expansion of the spirit by the heat, and, unless in careful and experienced hands, it was feared severals would set themselves on fire from it; some of the objections were, no doubt, groundless, but from the peculiar construction of the Vesta chimney, if the flame was raised over so little above the average height, the unconsumed carbon would deposit on the glass, and from thence on blows over the room. Messrs. Hayward, Tyler, and Co., of Cheapside (late), have been at a great cost to improve upon the Vesta lamp, by which they retain a much superior light, from more perfect combustion of the spirit—for a still less expense, and are enabled to use a straight chimney, so that even if the wick is turned up high and does not cut on a mushroom to the end. This improvement consists of two circular discs of brass connected together, one about half an inch above the other, the circular opening of the lower one being larger, and these form a long open round the flame, while the glass fitting close to the circumference of the upper one, the air is admitted only through the centre of the wick, by this means the most perfect combustion is obtained, with a flame emitting one-third higher than that of the Vesta, and clear and brilliant as the purest gas, but of a more perfect white, and at a cost of 3d. per hour. In some other various wicks to

SOUTHAMPTON AND DORCHESTER RAILWAY.—At a

MEETING, held at MATCHAM'S HOTEL, in the town and county of the town of SOUTHAMPTON, on Thursday, the 9th of May, 1844, to take into consideration the practicability of making a line of railway from Southampton to Dorchester, and, if the same should be deemed practicable, to adopt such resolutions as should to the meeting appear best adapted for carrying out so desirable an object—

Proposed by the Right Hon. the Earl of MALMESBURY, and carried unanimously—

That the Right Hon. Lord De MAULEY, and carried unanimously—

That Colonel Henderson (the Worshipful the Mayor of Southampton) be requested to take the chair.

Colonel Henderson having taken the chair, the meeting was adjourned to the Guildhall, Southampton.

The meeting having met at the Guildhall, and the Mayor having called on Mr. Charles Castleman to make his statement of the line, and estimate of the expense and traffic, and such statement having been made—

The Earl of MALMESBURY proposed, and Sir Hugh Jonnerow, K.S.C., seconded—

That, from the statement laid before this meeting, there is every reason to believe that a line of railway may be made from Southampton to Dorchester at a comparatively trifling outlay, if the traffic on the line is sufficient to ensure to parties embarking in the undertaking a fair remuneration for their outlay.

Amendment proposed by Mr. Brown (on behalf of Sir John Barker Mill), and seconded by the Rev. Mr. PHILLIPS—

That it is the opinion of this meeting, that, inasmuch as a bill is now before Parliament for making a railway from Bishopstoke station of the South Western Railway to Salisbury, it is desirable that any railway through the county of Dorset shall join such railway at Salisbury.

The above amendment having been put, it was lost by a large majority.

The original resolution having been put, the same was carried by a large majority.

The Right Hon. Lord De MAULEY proposed, and CHARLES CASTLEMAN, Esq., seconded—

That the Mayor of Southampton, the Right Hon. the Lord De Mauley, the Right Hon. the Earl of Malmesbury, the Right Hon. the Lord De Mauley, the Hon. Captain Harris, M.P., the Hon. Charles Ashley Powlett, M.P., the Hon. Colonel Dawson Damer, Alexander Mitchell, Esq., M.P., Alexander Mackinnon, Esq., M.P., Alexander Cochrane, Esq., M.P., Sir Edward Johnston, K.C.S., Captain Shortreed, R.N., Charles Hulse, Esq., Captain Chetwynd, R.N., Charles Lambert, Esq., Richard Bramston, Esq., Herbert Williams, Esq., Henry Rooke Parnell, Esq., John Brown, Esq., William Rolfe Pyper, Esq., Martin Kemp Welch, Esq., Captain Greathed, Arthur Henry Dyke Acland, Esq., William Charles Lambert, Esq., Richard Esq., William Rolfe Pyper, Esq., Martin Kemp Welch, Esq., Captain Greathed, Charles H. Burke, Esq. (Mayor of Lymington), Colonel Henderson (Mayor of Southampton), the Chairman and Deputy Chairman of the South Western Railway Company, Joseph Lobb, Esq., the Hon. William Burgess Bourne, G. R. Pyre, Esq., Geo. Hunt, Esq., George A. Wake, Esq., and Colonel Robbins, be a committee, five to form a quorum, and having power to add to their numbers, for making further inquiries on this subject—and that they be authorized to employ such engineer and surveyor, for ascertaining and surveying the best line of road, and for obtaining a correct estimate of the traffic, as they shall deem best; and that Messrs. Edward and Charles Castleman be the secretaries and solicitors of such committee.—Carried unanimously.

Captain RAYMOND proposed, and GILBERT STEPHENS, Esq. (on the part of Captain Crawford) seconded—

That a subscription be immediately entered into, and be entirely under the control of the said committee, and be applied by them in payment of the sums already disbursed for advertisements and other expenses, but not professional charges in calling this meeting, and in defraying the expenses to be incurred by the committee in pursuance of the last resolution; and that Messrs. Glyn and Co. be the London, and the National Provincial Bank of England the country, bankers.—Carried unanimously.

RICHARD BARTHROPP, Esq., proposed, and WILLIAM CHARLES LAMBERT, Esq., seconded—

That an Adjourned Meeting be held in the County Hall, Dorchester, on Thursday, the 27th day of June, 1844.—Carried unanimously.

G. HENDERSON, Chairman.

The Mayor having left the chair, it was proposed by Lord MALMESBURY, seconded by Sir EDWARD JOHNSTON, and carried unanimously—

That the best thanks of this meeting are due to the Mayor for his kindness in taking the chair, and for his able and impartial conduct in it.

GRAVESEND, STROOD, ROCHESTER, AND CHATHAM RAILWAY.—(MR. PEARCE'S LINE).

LENGTH OF LINE SEVEN MILES AND A HALF—A STATION AT EACH TOWN.

Capital £120,000, in 6000 shares, of £20 each.—Deposit £7 10s. per share.

PROVISIONAL COMMITTEE.

Lieut.-Colonel H. D. Campbell, Northend house, Hants.
G. M. Cutmore, Esq., Clarence-place, Gravesend.
H. S. Gibbs, Esq., George-yard, Bucklersbury, London.
William King, Esq., Maidstone.
James Lewis, Esq., solicitor, Rochester.
Moses Montefiore, Esq., 41, Torrington square, London.
Joseph Muthert, Esq., Clarendon Cottage, Gravesend.
James Murray, Esq., Windmill-street, Gravesend.
John Sedgington, Esq., Ald., Gravesend, Hawley-house, Fleurve.
William Vickers, Esq., 12, Somers street, Hyde-park, London.
Jonathan Wood, Esq., Windmill street, Gravesend.
Humphrey Wickham, Esq., Strood.
Thomas W. Wood, Esq., Chatham.

[With power to add to their number.]

BANKERS.—Messrs. Roberts, Curtis, and Co., London; Messrs. Hills and M'Kay, Gravesend; Messrs. Day and Nicholson, Rochester.

ENGINEER—James A. Emslie, Esq., C.E.

SOLICITOR—N. Linde, Esq., 113, Fenchurch-street.

SECRETARY—Henry Mead, Esq.

AUDITORS—D. Macmillan, Esq.

CONSULTING ENGINEER—Sir John Rennie.

Within the last few months no less than three distinct companies have been formed, with the view of opening a communication by railroad between the towns of Gravesend, Rochester, and Chatham, and public opinion has, in each place, been most satisfactorily expressed in favour of the general idea common to each undertaking, of bringing back at least a portion of the extensive traffic which had for centuries been carried through this part of the county. These circumstances, together with the fact, that, even with the present imperfect mode of conveyance, upwards of 10 passengers are carried between Gravesend and Rochester daily, are considered by the Committee sufficient to justify the present proposed undertaking, even were it possible to put forth any claim to superiority of design, cheapness of cost, and facility of execution.

The Rochester Company (whose bill was lost in the Standing Orders Committee) proposed to execute their line of eleven miles in length, with a capital of £220,000. The line wholly avoided the important town of Gravesend as well as Strood—had several tunnels, very heavy gradients, and presented throughout considerable engineering difficulties. Public meetings of the inhabitants of Rochester, Gravesend, and Strood, have acted unhesitatingly condemned it as the one least calculated to promote the public benefit, as that, in fact, out of a population of 40,000, through whose town it was proposed to run more than three-fourths are decidedly opposed to the scheme of the Rochester Company.

The Rochester, Chatham, and Gravesend line, encouraged either undertakings, had to contend with the insuperable objection of proposing to cross the Medway by a third ferry, and was rejected.

The third plan is that of the Thames and Medway Canal, which is at each terminus now a considerable distance from the nearest of the four towns, and cannot, by any possibility, be carried into Rochester or Chatham, inasmuch as the basin in former is that of the waters of the Medway.

The Gravesend, Strood, Rochester, and Chatham Railway now proposed is the only one which satisfies all the towns. It is only seven miles and a half in length, and will not exceed three-fourths of the estimated expenditure of the Rochester and Chatham Railway—has no tunnels, crosses no public roads at a level, and offers facilities for effecting an easy junction with London and Maidstone.

The terminus at Gravesend will be on the site of the railway buildings at the Fort Gate and of Lord Street, railway between the Town and Terrace Piers, and fronting the River. From thence the line will pass along the back of the Clarendon Tavern, through the grounds of the Fort, over the main adjoining the marshes, to the Canal, through the grounds of the Fort, over the main adjoining the marshes, to the Canal, crossing above to the river, which it crosses by a wooden viaduct upon stone piers, with drawbridge which is passed, with an 18-feet opening under the high road, and a short distance above Rochester bridge, near St. Margaret's Church, to Frog Town, the station for Rochester and terminus of the Gibraltar line, Chatham. The gradients of the line are extraordinarily easy, and the curves works after the manner laid down in the specimen of the Gravesend and Rochester Railway Company's Act, recently obtained, and are fully entitled that the line chosen by the engineer is, beyond all comparison, the best which could have been selected, and that the estimate is sufficient, from what has transpired, that the principal landowners, through whose property the line passes, are favourable to the undertaking. They have contributed to the amount of £30,000 per annum, expended by the Rochester Company, whose property the line passes, are favourable to the undertaking. They have contributed to the amount of £30,000 per annum, expended by the Rochester Company, whose property the line passes, are favourable to the undertaking. The line of the extended traffic £30,000 per annum, expended by the proprietors of the Canal Company, on three quarters of the amount anticipated by the promoters of the Canal Company, on three quarters of the amount anticipated by the promoters of the Canal Company, on three quarters of the amount anticipated by the promoters

MINING RECORD OFFICE, 5, SHORTER'S-COURT, THROGMORTON-STREET.—The large amount of capital invested in mining companies being rapidly on the increase, while the facilities afforded for ascertaining information are admitted to be inadequate, have induced Mr. HENRY ENGLISH to make such arrangements, as he considers, will be deemed satisfactory; and, if not perfect, at least be an approximation to the desired end—that of forming a medium, but, by collecting regularly from the several mines, with copies or abstracts of the costs and returns, correct general information for the adventurer, which, at present, can only be acquired with considerable trouble.

The MINING RECORD OFFICE will be OPEN to all parties SUBSCRIBERS to the *MINING JOURNAL* where the various reports may be consulted. A separate room is appropriated for meetings of parties on business, and every facility rendered calculated to promote the object of acquiring correct information. The current prices of the ores will be quoted daily, so far as is practicable. Mr. English is proud of saying, that the several mine holders and agents sanction the measure, and whose assistance he respectfully courts.

Reports and copies of accounts filed immediately on receipt, and plans and sections of the several mines will be kept, and carried on from time to time, for reference.—Parties resident in the country may have their letters addressed to the Mining Record Office.

Mr. ENGLISH will be happy to attend to the commissions of friends in the purchase or disposal of Mineral Property, Mining, Railway, and other shares, and all transactions connected with the money market.

A Register kept of Shares for Purchase and Sale.

*** Office hours Ten till Five o'clock.

5, Shorter's court, Throgmorton street, April, 1844.

THE PATENT SAFETY FUSE,
FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the safest, cheapest, and most expeditious mode of effecting this very hazardous operation. From many testimonies to its excellence with which the Manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.S.S., &c., &c.—

"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conception of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name on occasions of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall.

SPELTER-WORKS FOR SALE, TO BE SOLD, a SPELTER-WORKS, consisting of four furnaces for calcining ores, pot arch, heavy crusher with iron rim for reducing the ore, blacksmith's shop, warehouse, and every requisite for carrying on a work of this description. Coal, the great desideratum in spelter making, is to be had in abundance, and at almost a nominal price, the works being surrounded by collieries, as connected by a railway thereto, which also leads to the shipping port. The above works, and about two acres of ground, are held under a long lease, at a low rental, and ample room can be given by the proprietors for extinguishing the same.—For particulars, and to treat for same, apply to "W. B." Post office, Swansea, Glamorganshire.

YORKSHIRE LAND-DRAINING ASSOCIATION.
Capital £100,000 in shares of £5.—Deposit 1 per cent.
The provisional committee have determined to LIMIT THE TIME for receiving applications for shares in this association to THURSDAY, the 30th inst., on which day the list will be closed, preparatory to the allotments being made.
Prospectuses may be obtained from the solicitors, Messrs. Blanchard, Richardson, and Gatch, York; and from the secretary, J. H. Chadwick, Esq., Wakefield.
May 1.

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THIS, founded under the Friendly Societies Act, with an ample invested and guaranteed capital, and a large BENEVOLENT FUND.
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Thomas Hankey, Jun., Esq. | Baron Lionel de Rothschild.
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This institution presents peculiar advantages to clerks and their families. Prospectuses for life assurances, deferred annuities, &c., together with prospectuses and every information, may be obtained at the offices, where donations and subscriptions to the Benevolent Fund will be received.
GEORGE THOMAS, Chairman.
G. R. The Third Annual Report may be had on application at the offices.

PATENT IMPROVEMENTS IN CHRONOMETERS,
WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public that the manufacture of his chronometers, watches, and clocks is secured by three separate patents, respectively protected in 1837, 1839, 1842. Silver lever watches, jewelled in four holes, from £6 6s. each. Ditto lever watches, jewelled in eight holes, with gold dials, finished in gold cases, from £8 8s. each. Gold horizontal watches, with gold dials, finished in gold cases, from £8 8s. each. Gold duplex watches, or watches requiring winding only once in 36 hours, from £12 12s. each.—DENT'S PATENT DEPLETORIUM, or watch-maker's time-measurer, to time and regulate watches, to ten seconds per month, 10 guineas each. Pamphlets, containing a description and directions for its use, to be had, gratis, of the inventor.

OFFICE FOR PATENTS, 7, STAPLE INN, HOLBORN.—J. WEBSTER, of the above office, Patent Agent, has been successful in upwards of FIFTY cases in which he has been employed to oppose the granting of Patents, and has succeeded in obtaining the decision of the Attorney-General in favour of the opponents in every case but one, in which the Patent was granted for a limited period only. Mr. Webster has also been successful in obtaining the decision of the Attorney-General in favour of the petitioners against the granting of Patents in every case but one in which he has been employed to oppose the granting of Patents. Mr. Webster has also been successful in obtaining the decision of the Attorney-General in favour of the petitioners against the granting of Patents in every case but one in which he has been employed to oppose the granting of Patents.

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"DEVITT'S PATENT BRANDY, UNTOUCHED GOOD."
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NOTICES TO CORRESPONDENTS.

*** We shall next week publish an additional sheet, which will enable us to give the greatest portion of the Notes of the Week through the Eastern Mining District of Cornwall, as also much valuable and interesting information which has lately reached us and is expected to arrive by the Last of Saint Patrick Steamer. Descriptions of the Correspondents, &c., &c.—Letters and Directors, will be received until next week; also the Papers on Mining by Agricola.—Mining in America, &c.

* A Subscriber and friends thus"—next week.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, MAY 18, 1844.

A visit to the Eastern District of Cornwall has enabled us to collect some notes of operations, which, without entering into minutiæ, will be found to afford a tolerable idea of the working of the various mines in that locality; and, as it is intended only to convey a general view of the several undertakings, the observations must not be misconstrued—nor must the conclusion be arrived at, that where there is a paucity of information, such has arisen from neglect on our part, or from a disposition being evinced on that of the agents to evade satisfactory replies to our inquiries. We have to express the satisfaction we have derived from the courteous behaviour, and the kind reception, in many instances, we have received on our visits to the several mines—while it has been our object to avoid all heat, and merely to report as we found things, without being prejudiced by the reports of interested parties, or led to conclusions which facts would not justify.

It was our intention to have entered at greater length, and expressed the opinions we entertained, on the merits of the several adventures, and the promises they held out of successful results; but, on reflection, we found the task would be an arduous one, if not invidious in some cases, and that the charge of favouritism or prejudice might be applied to such line of conduct, however originally at the same time we feel, that according any remarks of this nature is the more prudent course—especially as our opinions must, from want of practical experience and knowledge, be deemed of little or no value. Hence, our remarks will be found to be confined to a notice of the local situations of the mine, the extent of the vein, the several workings, with a brief notice of the machinery employed.

We are fully sensible that the reports must, in the main, be considered as of an imperfect nature; but it is to be remembered, that in all cases we presented ourselves without being armed with authority from the managerial powers, and, consequently, there was every delicacy in putting questions, as well as unnecessary on the part of agents to give replies. Having said thus much for ourselves, we have to observe we have endeavored to substantiate, wherever we have been indebted for information, we proceed to make a few passing remarks on subjects connected with mining pursuits, which appear to us not to meet with sufficient attention on the part of shareholders, or the objects to be duly appreciated in their several bearings.

We may here observe, that, having been favoured with more than ordinary facilities in the Fowey district, we have devoted some space and attention to those mines—a notice of which will appear in our next Number; as also some returns from the Caradon district, accompanied by a rough hand sketch of the relative position of the several mines; and, with this reference to the absence of reports which might be expected to accompany those now presented, we at once proceed to those general remarks on the points to which we have already briefly adverted.

We shall, first, take the system of "weekly reports," which it is only due to the agents we should deprecate. The communications we have received, and the result of observation, lead us to the conclusion that the course pursued is one which is neither politic, nor is it calculated to effect the desired and looked-for object. The intention is, doubtless, founded on the best of motives on the part of the directors, to render periodical returns from the mines to the shareholders; but, it should be remembered, that, in many cases, where levels are being driven or shafts sunk, there can be nothing novel to communicate, while the agents are expected to say a something. Even in ore ground, where tribute pitches are set monthly, the result can only be arrived at on the termination of the bargain—indeed, we believe, in more than one instance, reports have, if not manufactured, been at least so varied in language, with no new features, as to be calculated to mislead adventurers, and that quite unintentionally on the part of the agents. Another objection is, that a report may be transmitted by the one post, whereas, before it reaches its destination, a change of ground may take place, either for the better or worse; whereas, such is not communicated until another week has expired, while those in the secret—and there are some both in the county and in London — are at all times well informed of the changes, and take advantage of them, by buying or selling shares, while the generality of shareholders are in ignorance. What we should, therefore, recommend is, that a "monthly report" accompany the monthly cost-sheet—that reference be made to the several items therein, whether with regard to any change in the ground, the rate of bargains, the produce of the mine and sales of ores, or the total monthly costs and returns. This should be placed each month before the shareholders; and any other reports or communications from the mine should only be furnished where a change justifies the communication being made. To enforce a weekly return from an agent, whose attention should rather be directed to underground operations than to the effect which his report is calculated to make on the price of shares in the market, is, we consider, a wrong mode of procedure; and if communications be made only when there is any thing worthy of notice, we feel assured that the adventurers would take a more anxious interest in the undertaking; and, in the end, such course would be productive of much benefit to them, and, at the same time that it relieved the agent from an irksome duty, would impose upon him a responsibility which, we feel assured, he would readily take upon himself, and cheerfully observe the duties attendant thereon.

The next point to which we would direct attention—and any one visiting the mines cannot fail to observe the necessity of an alteration taking place—is, the interference of the London management with the working of a mine, thus fettering the agent, and taking from him all responsibility, and, in a great degree, the interest he should feel for the adventure, and the pride consequent on success. We are led to make this remark from the comparative apathy evinced in more than one mine, where orders from the London gentlemen must be obeyed, although we are convinced that the measures adopted are in opposition, in many instances, to the opinions of the practical agents employed. Indeed, it is as absurd to suppose a banker or merchant competent to direct mining operations, as it is for the mining captain, who has been bred and brought up to his vocation underground, entering upon mercantile pursuits, and conducting money matters on 'Change. But we regret to find that self-constituted directors too oft take upon themselves to direct this level to be driven, another to be abandoned—this work to be done, and that to be left undone—while we believe some have even gone so far as to say, that a cross cut to take the lode should not be driven without it could be set on "tribute"—which leads us to arrive at the conviction, that where mining operations are not left to those whose vocation it is, the ill-success which attends adventures must be attributed to want of confidence in the local management, and to an improper interference on the part of London directors, rather than to the absence of honesty and ability on the part of the agents, or the unproductiveness of the mine.

One of the consequences of this interference is, that men well able to perform their duty—if that they act on the orders of self-constituted managers and directors of mines, simply because the money is contributed by London or other out-adventurers, and that the mine proves unsuccessful—lose their "costs," or station, in the mining world, as the discredit, if any, for ill success, is thrown upon them; and hence, we know it to be a fact, that in several mines persons are employed as agents who are incompetent to perform their duties, but who act as "cloaks" to those by whom they are appointed. Another evil is, that where a power of this description is exercised by the directors, it may be for needful and interested motives that work is ordered to be done, which, involving a cost, disgusts the adventurers, while other levels or underground operations of promise are left unattended—the consequence is, that shares fall in price; in the mean time, the work is done, shares are bought up, and a promising "end," which was left for a future day, is resumed—ere it is returned, the weekly reports are favourable, shares rise, and the "knowing ones" turn out their surplus shares. We are not conjuring up any imaginative ideas—for we know that such things have been done; indeed, whatever good prospects may be held out by the mine, if worked properly—while such a system prevails, it is futile to expect any beneficial results. Thus much for London management.

We now arrive at another important point connected with mining operations, and regret that we should find cause to count for any remarks on the absence or neglect of keeping underground plans; this, we are sorry to say, is too oft the case, and, in more than one instance, we have found where they were partially kept, the agent was incompetent to explain them. We do not blame the agents, but the censure should fall on those who undertake the management; it is their duty to see that those plans be kept up regularly, and a tracing should be sent every one or two months to the office in London, or elsewhere, so that at any future period they may be consulted, and, at the same time, that the nature of the workings may be understood. If, for instance, we were to take Fowey Consols, with upwards of twenty lodes, some twelve or fourteen of which are being worked upon at a depth, in some instances, approaching 240 fathoms, extending over a vast area, how is it to be supposed that the workings could be carried on were it not for so valuable an adjunct as that of an underground plan. True it is that in a mine of limited extent all the several points may be known to the agent employed; but, suppose any ill should befal him, or that he should be confined, how, then, is the information to be acquired, more especially in cases of accidents to machinery, or rises of ground? The object of a couple of guineas or so per month in making compared to the expenses to which the adventurers are frequently subjected by false dialling or "guessing" of agents. It is now much to expect that in a mining captain you possess a man whose knowledge of geology and mineralogy, trigonometry, engineering, dialling, laying down on paper the several bearings, as well as that of an accountant, shall be perfect—yet we know some have looked for this, while their object should be to have a man who has "handled the pick," and knows the value of ground; therefore it is that we would impress on shareholders generally, that while each agent should be limited to the performance of his duties, yet that there should be no false economy observed, in not having fit and proper agents for the several works—and none appears to us to be of more importance than that of keeping a faithful record of underground workings.

We have already carried our remarks to some length, and as we shall resume the subject next week, when we close our notice of the mines in the eastern district, we shall then submit to our readers such further observations which occur to us as bearing on the question.

TOUR THROUGH THE EASTERN DISTRICT OF CORNWALL

Our object in directing personal attention to the Mines in the Eastern District of Cornwall is explained in another column, and we have only to observe that our endeavour has been to collate that information which may be considered to be of general interest, and not to intrude our inquiries beyond that point which we consider to be public property. It will be seen that in some instances our notes are more fully given than in others, arising from various causes—there being, however, no instance in which the absence of information is to be attributed to want of diligence on our part; but, having made a commencement, we feel assured that, on a second visit, we shall be able to fill up the hiatus which may be detected on the present occasion—and that if our present notes may, in some instances, be considered meagre, those which may hereafter appear will not be subjected to such charge. It was our intention to have classed the reports in the several districts we visited, but the absence of some promised details have precluded us from following out that course. The number of mines visited approach forty; and, in many instances, the information acquired will, we believe, be found to be original, and only to be obtained by observation on the spot. We shall be happy to correct any errors into which we may have fallen; and have only to express the hope, that credit will be given for the intention, however much we may have failed in the accomplishment of the object.

EAST CROWNDALE (new to Wheal Anderton, in the Tavistock district).—We did not visit this mine, being content with the information acquired off the ground. It is spoken highly of; but we believe it yet remains to speak for itself; we understand, however, shares are selling at a tolerable price.

EAST HARRAWARROW AND WHEAL HARWER MINES.—This sett is extensive, being about 600 fathoms on the run of the lode. The dues are 1-10th, being held under the Duchy, under lease, of which twenty years are unexpired; the Duchy, however, does not claim tin. There are no buildings at surface, and the water-power is limited, rendering it necessary, to work the sett, that an engine should be put up; its situation is two and a half miles from Calstock, or Cothele, query; the water is but little, and a 30-inch cylinder, it is considered, will command the sett. There are several lodes in the sett, and a deep adit driven, calculated to take the lode at forty fathoms—having taken one of the lodes at the twenty five, a downright shaft has been sunk to the sixty fathoms level. There are four lodes, one of which produces tin; there is also a copper lode, with a silver-lead lode within a few feet, which is considered to be the Wheal Brothers lode, ore from which has been lately sold at 130*l.* per ton; there is also the Wall lode and Harrowbarrow lode—the last underlying north and the other south; the extreme distance between these lodes is 720 fathoms. A shaft has been sunk to a considerable depth, but there are no appliances to unwater the mine; it may be said to be idle, although a fair speculation.

DARTMOOR UNITED MINES.—We did not visit these mines, but were informed that proceedings in Chancery have kept them idle for some years. The adit is twelve fathoms, and the deepest level twenty-eight fathoms; about 700*l.* has been outlaid here. Three tin lodes have been discovered.

CALLINGTON MINES.—The shares in these mines are divided into 1000, on which 11*l.* has been paid. The sett was formerly worked as the Redmoore Mines, and, after a large expenditure, was abandoned by the adventurers, the mine having been worked until it was left poor. Much credit is due to the present company for the enterprising spirit which they have displayed; the result of which is the return of about twenty-five tons per month of lead ore, which covers about four-fifths of the expenses of the working. There is, however, cause for remark on the mode of working, and the disregard which we consider is observed as affects Johnson's lode (copper) and the Holmbrush lodes, which latter are completely neglected—on Johnson's lode we think there is not fair play given; it is, however, of course, a matter of opinion, and we should not offer ours if not supported by practical men. At the north mine is an engine 50-inch cylinder, with 12-inch plunger. They are now driving the sixty fathom level here to meet the level at same depth from the south mine. A cross-cut is going out at the seventy, which is supposed to be five fathoms from the lode, and they are sinking to the eighty, which it is expected they will reach in August; the pitwork is complete down to the seventy fathom level. The assumed distance, for we did not obtain correct figures, between the sixty end from the north mine to that south, was 130 fathoms, but from other data at which we arrived we should consider it to be somewhat less. The distance driven from the north mine at the sixty fathom level to meet the end driving south, is said to be seventy fathoms. The lead lode in that on which the principal dependence is placed, the copper lode, to which we attach some importance, having comparatively neglected; the latter ranges 15° south of east, and is distant, by cross-cut at the fifty fathom level, about twenty fathoms; the lode being two to six feet big, on which thirty fathoms have been driven. The lead produces from 50 cwt. to 70 cwt. of silver per ton, the price obtained for the ore being about 20*l.* per ton; the size of the lead lode is about eighteen inches big. There is a crusher on the mine worked by water-wheel, 14 feet diameter, with 9 feet breast. The distance between the two engine shafts is 283 fathoms, and a railway is about being laid down, so as to bring the ores from the north part of the mine down to the dressing floors south, which will be attended with economy. A new wheel is about being erected for stamps of 40 feet diameter, and two feet breast; the castings are on the ground, and the wheel-pit cut. At the south mine is an engine of 60-inch cylinder, which was formerly at the De Dunstanville Mines; it works very pleasantly. The lead lode ranges 42° degrees south of south; the shaft here is 9 feet by 7 feet, and depth sixty fathoms under adit, which is eight fathoms from surface. The principal levels working in this part of the mine are the sixty (which is to eighty fathoms), the seventy, and eighty, which are far behind. The engine works about five strokes per minute, with a 13-inch plunger. There is also a small engine employed dressing ores.

WHEAL MARTHA.—This is an extensive sett ranging north with the Holmbrush lodes; it is divided into 4000 shares, on which 2*l.* per share has been paid. This sett was formerly worked by Mr. Manders, and comprises Wheal Martha, Wheal Abdon, and Burnthill; the latter being the most eastward. The sett extends for about 1200 fathoms on the run of the lodes, and is held under the Duchy at one-eighteenth dues; there are seven leaders being laid open at surface, which latter run north and south—the extreme lodes north and south being tin lodes. There are three water-wheels (one having been lately erected to work Benjamin's lode, the new discovery)—viz., one at first diameter of engine-shaft, on Wheal Martha lode; a 34 feet wheel for crusher and stamps; and a 36 feet at Benjamin's lode. At Wheal Martha the bottom level is sixty fathoms below adit—although the shaft is sunk down to the seventy, at which point nothing has been done. The lowest point of present set ore is the forty, fifty, and sixty fathoms levels; the sixty having been only driven twelve fathoms east, and the fathoms west. It is intended to sink and drive at this part of the sett; the mine is in both within about three fathoms. Benjamin's lode is a new discovery, and the works here, both at surface and underground, have been prosecuted with vigour. A water-wheel of 36 feet diameter having been erected and put to work a few weeks, a level fathomed to the extent of 210 fathoms, taking the last water from the large wheel at Wheal Martha, and 140 fathoms also cut, the shaft has been sunk five fathoms below adit, and the lode opened on the lode to the extent of fourteen to fifteen fathoms, showing ore throughout, mixed with grauan, mundic, and spar; the vein in these two to three feet big, but improving in going deeper; the work above enumerated was accomplished in the short space of six weeks. It is expected that the south will be sunk another six fathoms within the next five weeks, when they will drive on the lode at that point. The country is white killas and very ground, worth ten, to 20*l.* per fathom for driving, and the ores about four, to 6*l.* The adit at Trespare's shaft is five fathoms from surface. The whole number of men employed on Wheal Martha and on Benjamin's lode is fifty-six.

Remarks on the Fowey district, including Fowey Consols, Par Consols, West Fowey, as also the railway and works to the locality, will follow—as also several notices in the Caradon district, information [illegible] with regard to South Caradon; as to some inquiries which were not satisfactorily answered on the spot and leaving reached us at close of going to press. With our remarks of next week, will be given a hand sketch, showing the position of the several mines in the Caradon district, as also a drawing of the viaduct on the line of railway to Par Harbour.

HYDROSTATIC BOARD OF TRADE BILL.—In the House of Commons, last night, this company's bill was read a second time, and committed.

PROCEEDINGS OF PUBLIC COMPANIES.

PROVINCIAL BANK OF IRELAND.

The annual meeting of the proprietors of this establishment took place at the bank, in Old Broad-street, on Thursday, the 16th instant, and was numerously attended.

Matthias Attwood, Esq., M.P., having been voted to the chair, said, in taking upon himself that duty, in obedience to their wishes, he could not help expressing his feeling that the chair could have been filled more advantageously and satisfactorily by many gentlemen he saw around him; however, the task of their chairman was never a difficult one, but, on the contrary, an agreeable task, which would also be so now, as he hoped the report they had prepared on the state of their affairs would prove satisfactory to the meeting. It was always a pleasure to meet so respectable a body of proprietors, who had on all occasions acted with the directors in a spirit of harmony. According to the business of the day, the secretary would read the advertisement calling the meeting, when he should have to propose the re-election of four directors, who went out by rotation, and take the sense of the proprietors as to their re-election, after which there would be submitted the report which the directors had prepared on the state of their affairs.—Mr. Marshall (the secretary) then read the advertisement convening the meeting.

The Chairman proposed the re-election of Sir Robert Campbell, Bart., Oliver Porter, Esq., Samuel Eustace Magan, Esq., and Joseph M. Monteflore, Esq., as directors.—The Secretary said, according to custom, the names of the gentlemen proposed for re-election had been hung up for twenty-eight days in the public part of the office.—The above gentlemen were then unanimously re-elected.

The Chairman said, he hardly knew that any observations were necessary on his part respecting the report, which had been drawn up in the first instance by their excellent secretary, Mr. Marshall. The reports made by the directors from time to time were not strictly confined to the exact condition of the affairs of the bank, but gave very valuable information generally on the state of the agricultural and commercial interests of Ireland, with which the bank was so intimately connected. These reports were always drawn up with great accuracy, and the facts came from the most authentic sources. The report now to be read contained, as usual, the views of the directors on the present state of the affairs of the company, which he hoped would be satisfactory to the meeting; and, after it had been read, he should be happy to answer the questions that any proprietors might propose. (Applause.)—The Secretary then read the following

REPORT.

In the report made to the proprietors at the yearly general meeting, in May, 1843, the directors had occasion to advert chiefly to two distinguishing features by which the transactions of the year, which had then recently terminated, had been marked —viz., very great fluctuations in the prices of agricultural produce, and the unprecedentedly low value of money; by both of which circumstances the business of the bank had been unfavourably affected. It is satisfactory to the directors to be able to state, on the present occasion, that during the year which has since elapsed, there has been no extraordinary fluctuation of prices. With respect to every description of produce in Ireland, the season, with a few exceptions in some districts, was favourable. The crops were, in most cases, an average as to quantity, and in several instances exceeded that estimate, whilst the quality was almost invariably good. In the various markets for both corn and provisions, the prices obtained were moderate and steady. There was, consequently, very little inducement held out for speculation; and the result has been that the transactions of the year have passed over with comparatively greater exemption from mercantile failures in the trade connected with Ireland, than have those of many of the years which preceded it. The linen manufacture in Ulster has been fairly maintained; and, with reference to the report of last year as to the linen trade generally, it is proper here to state, that the observations then made with regard to the culture of flax in Ulster are fully confirmed by the continuing increase in the quantity raised, as well as by the great improvement of its quality, which has been attained under the Belgian system of management recently introduced, and now becoming so prevalent in the north of Ireland, that it promises ere long to supersede, in a great measure, the necessity of importing the finer descriptions of flax from the continent. The only circumstance of a local nature with respect to banking in Ireland which the directors have to communicate is the discontinuance of the branch bank at Moneymore, in the county of Londonderry; which, as it did not, after sufficient trial, answer the expectations that had been formed of it, was withdrawn at the close of last year. With respect to the other prominent circumstance, which was stated at the outset of the present report as having had an injurious effect on the banking business of last year—viz., the low value of money in the market, the directors are unable to announce that any improvement has taken place. On the contrary, they have to remind that, during the whole of the year which has passed, the money market has experienced further and continued depression; to such a degree, indeed, that all banking establishments have been compelled to submit to lower terms in transmitting their business than has ever been known since the commencement of this bank in the year 1825. The proprietors will naturally have supposed that the directors must have been looking with considerable anxiety to the measures that were about to be brought forward by Government, respecting the renewal of the Bank of England charter, and the system of banking generally. Now that the measures proposed by Government have been submitted to the consideration of Parliament, it does not appear to the directors that those measures, as they understand them, will at all affect, for the present, the existing banks of issue in Ireland, while, at the same time, no new banks of issue, in any part of the United Kingdom, are to be allowed. The directors have now to call the attention of the proprietors to the account of the bank's affairs, which they have to submit to the meeting; and in doing so, they have much pleasure in stating that, although, for the cause which has been referred to, the profits of the past year are not equal to those of some former years, the directors are not only enabled to distribute the dividend on the paid up capital, at 9 per cent. as hitherto, but also to make an addition of 10s. to the "rest" of last year; and they may further assure the proprietors, that on no former occasion have the affairs of the bank been in a more healthy condition than they are at the present time. The statement of account which the directors now submit to the meeting is as follows—viz.:

By the account last before the proprietors at the last general meeting, the amount of rest or undivided profits, at March 25, 1843, was £37,111 9 10
From which there has been deducted the amount of two half-yearly dividends—viz.:
At Midsummer, 1843, 4 per cent. £17,500
And at Christmas, 1843, 5 per cent. 17,500
Together 35,000 0 0
Leaving a balance of £2,111 9 10
To which there has been added the amount of net profits for the year ending the 25th, being the last Saturday of March, 1844, after deducting all expenses, and providing for all bad and doubtful debts 37,112 10 0
The said net profits being £37,112 10 0
Less the amount of property tax for the year ending April 5, 1844 1,611 5 5
Leaving to be added to the foregoing balance the sum of 35,501 4 10

And showing the amount of rest or undivided profits, at 25th March, 1844, to be £37,612 14 0

Out of which, as before stated, it is the intention of the directors to pay on account of the 25th day of July next, a dividend of 4 per cent. for the half year, ending Midsummer, being at the rate of 8 per cent. per annum, or £1 on each share of £25, and 5s. on each share of £12 10s.; and, further, to pay the property tax for the proprietors, as they have done for the two years bygone.

The Chairman proposed "that the report be received, entered on the minutes, printed, and circulated amongst the proprietors."—Mr. Cooke seconded the motion.—The Chairman said he hoped it would be seen by the report, that although, through the low value of money, their profits had been low, the bank still existed on a satisfactory and firm basis, with a more prospect of future advantage, because, from year to year, they were naturally look for this bank extending its ramifications, and obtaining there and more the confidence of the gentry, traders, farmers, and, indeed, of every class, where its branches were established; so that every year must offer a stronger guarantee of its future prosperity. It was a source of great satisfaction to the directors, and he was sure it would be to the proprietors, to hear that it was universally acknowledged in Ireland how great were the benefits that country had already derived from this establishment. (Hear, hear.) He was sure it would be a gratification to every proprietor, whenever he received his dividend, to know that the fair remuneration which he was receiving for his capital invested in this company was derived from the advantages conferred upon, and not from the injury of, any portion in Ireland, for whose benefit the bank was mainly established. This consideration induced so many gentlemen of enterprise to succeed the efforts of the capitalists who first established this company, knowing well their views were not so much to profit, as to extend to Ireland a safe, permanent, and solid system of banking (hear, hear); and seeing, now, how the advantages were appreciated from all quarters, it must be a source of pride and satisfaction to those gentlemen and the directors, as it was to himself, who had only taken a very humble part in forming this establishment. (Applause.) He would say that he claimed no portion of this merit, which was due to the gentlemen by one named him, who, by their universal commercial knowledge, and their great attention to the business and interests of this company, had made it in such a safe footing, as to be in itself quite independent. (Applause.)

Serjeant Warren, Esq., asked whether there was any truth in a report he saw in one of the Irish papers, of the directors' intention to employ Irishmen in their banking establishments. He thought that was necessary to the views and feelings of the directors, that he should like an explanation, as such remarks might have an injurious effect on the company.

The Chairman said he was happy to be able to give the inquirer to such a report, of which they had heard from the same source. He could state that the directors were disposed to give the preference to, rather than to discourage, Irishmen entering the branches of this company. He happened to have the figures before him of the number of English, Irish, and Scotch officers employed in the different branches of this establishment, from which it appeared that there were 157 altogether employed in Ireland, of which thirteen were English, forty-six Scotch, and ninety-eight Irishmen. (Hear, hear.) This showed no partiality on the part of the directors to reject Irishmen; and he could say that if they had two candidates for an office, and they were both equal in other respects, the directors would generally choose the Irishman. They had certainly sent a great many Scotchmen to Ireland, but it was because they were well trained to the Scotch system of banking, which it was the object of the directors to introduce into that country (hear, hear); so that at the beginning there were only thirteen Irishmen in the branches, which had now been increased to ninety-eight, and which number it would be their object still to increase. The majority of their managers were still Scotchmen, being twenty-three at present; besides whom they had four English managers, and nine Irish managers; and out of three inspectors, two were Irish. (Hear, hear.) They had at every one of their branches local directors—two, three, or four of the most eminent mercantile men where the branch is situated; and as to these, they were all, without exception, Irishmen—and most valuable was their aid to this establishment, with the head board of which they were in constant communication, and from time to time reported everything affecting the business of the bank in Ireland. (Applause.) Before he sat down, he should observe, that many of the ninety-eight Irishmen employed by the bank were young men, and were, he might say, in training, and could, as they became more experienced, be advanced to higher offices, as they became vacant. He thought this statement was a sufficient contradiction of the report alluded to by Mr. Warner. (Applause.)

Mr. Warner said he was perfectly satisfied, and so must be the meeting—so that he did not regret putting the question, for it had brought forth a most satisfactory explanation. (Hear, hear.)

Samuel Dixon, Esq. (High Sheriff of Limerick), could bear testimony, as an Irishman, to the fair and honourable conduct of the directors in dispensing their patronage. (Hear, hear.) In the outset of the establishment there was some difficulty as to suitable persons, but now they had some of the most valuable officers who were Irishmen, and the management on their part was both excellent and creditable to themselves. If there were no other business before the meeting, he should be happy to move—"That the thanks of the meeting be given to the chairman and directors, for their zeal and ability in managing the affairs of that establishment." (Applause.)—The sense of the meeting was then taken on the report, which was adopted unanimously.—The vote of thanks to the directors was then proposed again by Mr. Dixon, and, having been seconded by Mr. Warner, was passed with marks of approbation.

The Chairman said, on the part of the directors, he would beg to return thanks for their mark of confidence in this vote, for there was no greater satisfaction to them than to contribute all their exertions to the prosperity of this establishment, and no higher gratification could they receive than such a proof of the approbation and confidence with which their proceedings had been viewed by so respectable a body of proprietors as formed that company. (Applause.)

Mr. Cooke then proposed a vote of thanks to Mr. Marshall (the secretary), and the principal officers of the bank, for the satisfactory performance of their duties, which was seconded, and passed unanimously.

Mr. Marshall returned thanks, and in doing so said, he might mention that there was no establishment with which he was acquainted (and he knew the working of a great many) in which the directors gave so much personal and minute attention to every part of the business, as they did in the Provincial Bank of Ireland; there was, in fact, no part of the business that they did not see, and the reports which were annually made to the proprietors were the results of their own personal and anxious examination of every account existing in the books of the bank. (Hear, hear.)

The meeting then separated.

WEST WHEAL JEWEL MINING ASSOCIATION.

The second meeting of the shareholders in this undertaking was held at the offices, 23, Throgmorton street, on Monday, the 13th inst., J. Hannon, Esq., in the chair.—Mr. Nicholson (the secretary) read the notice convening the present, and the minutes of the last, meeting—also, reports from the agents at the mine, from the committee of management, and from the directors, giving a summary of the whole of the operations carried on during the past year, as detailed in the weekly reports published in our Journal, from which it appeared, that the ground opened in that period (upwards of 500 fathoms) was of the most promising character—and that the explorations of this year would lead to many points of interest, which would in a great measure stamp the future value of the mine, and towards which the agents looked with sanguine expectations.

The Chairman observed, that Mr. Richard Harvey, one of the committee of management in Cornwall, was present, and would be happy to answer any questions which might be put as to the state and prospects of the mine—when some conversation took place, in which Messrs. Chippendale, Mount, Tweery, Collins Harvey, R. Harvey, and the chairman, took part.—The results of the working of the mine during the past year gave much satisfaction, the returns having rather more than covered the expenses; while the position of the mine, and the ore in sight, was quite equal to what it was at the last general meeting, the latter being estimated at 30,000l., thus proving that the returns had resulted from tutwork alone, and not by "picking out the eyes." In the course of the next six months, or so, several important points will be laid open, and which are being looked forward to with much anxiety; and, as hitherto wherever the lodes have been cut they have pretty generally answered the indications given in the higher levels, very sanguine hopes are entertained that the expectations will be fully realized—and, as Mr. Captain Harvey observed, "West Wheal Jewel is not a little trifling mine; there are some extensive works in her; and I have no doubt, in two years more, we shall make her a good, a permanent, and profitable property."

The report and accounts were then adopted, and votes of thanks were unanimously passed to the Cornish committee of management, the directors, the agents and purser at the mine. Mr. Wilkinson, who went out of office by rotation, was re-elected a director; and thanks having been voted to the chairman, the meeting separated.

GREAT LEINSTER AND MUNSTER RAILWAY.

An adjourned special general meeting of the proprietors of this company was held at the office, 61, Moorgate-street, on Monday, the 13th instant, at which Benjamin Shaw, Esq., presided.—There were about thirty proprietors present.—The Chairman said they had met by adjournment, for the purpose of considering how their line could be taken up by, or amalgamated with, the Dublin and Carlow Railway Company, which was with them, to a certain extent, a competing railway. He was sorry they had not instead of the directors present who had first commenced this business, as they might have been more successful, and it would have been more satisfactory. Although there was a prospectus before them of another line, they had met to carry into effect, if possible, their original line from Dublin to Kilkenny, for which they had still their Act; those years of which was exempted.—Mr. Shaw could be had been called upon to discharge the duty of Mr. Hart (the secretary), who was seriously ill.—Mr. Dodgshon: What is the date of Mr. Hart's serious illness? I saw him only as late since, and he looked uncommonly well. (Laughter.)—Mr. Shaw said he was so informed; and this unexpected stalling a number of letters from absent proprietors, appointing of the "Irish South-Eastern Railway," amongst whom he mentioned the names of several noblemen and Members of Parliament.—From the prospectus prepared by the committee, it appeared that the South-Eastern Railway was proposed to start at a point to be selected on the great southern trunk from Dublin between Sallins and Naas-cross, which it will pass through Athy to Carlow; from Carlow to Kilkenny it will pursue the old Dublin and Kilkenny line; thence to Clonmel, it is proposed to adopt the line recommended to the Dublin and Kilkenny Company by Mr. Abel, and from Clonmel to Waterford the line will run the valley of the Suir, as engineered by Mr. Bald, resident engineer to the Clyde. The capital would be £,000,000l., and the estimated expense was £1,000l. per annum. A branch to Wexford was also proposed—capital £70,000l., and estimated with income £4,000l.—A conversation then took place between the Chairman, Mr. Smith, Mr. Bramwell, Mr. Wingate, Mr. Stephens, Mr. Sinnott, Mr. Lawless, and others, when Mr. Smith said it was almost their original line, for all places in that prospectus had been surveyed, and paid for, except a small portion between Clonmel and the city of Waterford, which was almost a dead level. (Hear, hear.)—Mr. Bramwell thought it would be premature to go into the prospectus of land, without first trying to arrange matters with the Dublin and Carlow Company. (Hear, hear.)—Mr. James Pitcher, jun., said it would be much better, and he would recommend the committee to divide this proposed line into two portions, by first completing the line to Kilkenny as proposed, then completing, or leaving to separate companies, the other places proposed in the prospectus.—Mr. Pierce Butler, M.P., was present, and offered his assistance, as well as that of Mr. John O'Connell, M.P.—After much discussion, it was moved by Mr. Bramwell, and seconded by Mr. Wingate:—"That a communication should take place with the Dublin and Carlow Company, to ascertain their feelings, and to obtain a branch to Athy and Carlow for the main trunk near Kildare, so as to continue the project of this company, and to report to an adjourned meeting."—The Chairman said, in the mean time, a communication would take place with some of the directors of the Kilkenny Company, in hopes that they will appoint a meeting that would be more legal than the preceding one.—The meeting then adjourned to the 30th instant.

SHEFFIELD, ASHTON-UNDER-LYNE, AND MANCHESTER RAILWAY COMPANY.

A special general meeting of the proprietors of this company was held in the large room of their station, Store street, Manchester, on Monday, the 13th inst., John Chapman, Esq., in the chair, for the purpose of having submitted to them the draft of a proposed bill for making, from the main line of the said railway, a branch railway to the towns of Ashton-under-Lyne and Stalybridge; and for making, or obtaining powers for making, from the said branch, another branch railway to the colliery of Messrs. Lees and Booth, called the Hurst Tunnel, or Hollinbottom Colliery, in the Hartshead division of the parish of Ashton-under-Lyne.—The Chairman said, they had met merely to confirm a bill about to be brought into the House of Lords, and to which their lordships required the previous approval of the proprietors.—Mr. Stephenson (solicitor to the company) observed, that it was intended to alter the title of the bill, as the committee of the House of Commons thought the company ought not to have the power to make the coal branch, and they had struck out the clauses proposing to give such power, by reason, he thought, of the House having approved of another line, from the Leeds line to Ashton, which this line would cross. It was provided by this bill, that an additional capital of 91,000l. be raised by subscription, power being given to create new shares, to be considered the same as the original shares, and also to borrow money to the extent of one-third of the new capital.—The Chairman then moved, and Mr. Sir. John Yates seconded, a resolution approving of the bill, which was carried unanimously.—After a conversation as to the state of the works on the line, and the propriety of reducing the tolls of the company (a course to which, it was observed, the Manchester and Birmingham Company were favourable), the meeting separated.

MINERAL AND METALLIC STATISTICS.

By the returns to five several orders made by the House of Commons, which were obtained by the exertions and perseverance of Sir J. J. Guest, Sir C. Lemon, and Mr. Evans (M.P. for North Derbyshire), we are enabled to lay before our readers a most correct account of the various exports and imports of iron and iron ore, hardware, cutlery, &c., copper ore, copper, tin, zinc, lead ore, and lead, for the year ending Jan. 5, 1844.

Commencing with iron, it appears there was imported in the year, iron ore, 131 tons; chromate of iron, 1393 tons; pig-iron, 243 tons; unwrought iron in bars, 12,795 tons; bloom, 563 tons; rod-iron, 12 tons; old, broken, and cast-iron, 286 tons; cast-iron, only 8 tons; steel, unwrought, 1697 tons—of these, 97 tons only were entered by weight, the remainder by value, 11,035l. 6s. 9d. Of the several countries from which these importations came the principal is Sweden, whence we have received of iron 10,909 tons, and steel 1558 tons, leaving but a small portion to divide between twenty other places.—Our exports of foreign iron have been, unwrought in bars, 3986 tons; rod, 10 tons; hoops, 2 tons; cast-iron, 11 cwt.; steel, unwrought, 1456 tons. The total quantity of foreign iron retained for home consumption was 14,782 tons, upon which the net amount of duty was 14,563l.—The exportation of that staple produce of our own country, British iron, was as follows:—Bar-iron, 176,148 tons; bolt and rod, 22,623 tons; pig-iron, 154,770 tons; cast-iron, 16,449 tons; iron wire, 1508 tons; wrought-iron, consisting of anchors, grapnels, &c., 3058 tons; hoops, 14,591 tons; nails, 6020 tons; and all other sorts, except ordnance, 44,577 tons; old iron for manufacture, 5924 tons; and unwrought steel, 3199 tons. Those places which have taken the greatest portions of this produce are—Russia, 10,963 tons of bar-iron; Denmark, 10,447 tons bar, and 7019 tons pig; Prussia, 12,009 tons bar, 17,480 tons pig; Germany, 13,298 tons bar, 6322 tons pig, 1339 tons cast; Holland, 17,509 tons bar, 75,953 tons pig, 4317 tons cast; Belgium, 4279 tons cast; France, 4237 tons bar, 22,103 tons pig; Italy, 21,930 tons bar, 3982 tons bolt and rod, 3905 tons pig; Turkey, and Continental Greece, 6412 tons bar; East Indies, and Ceylon, 20,620 tons bar, 2967 tons bolt; British North American Colonies, 6837 tons bar, 1995 tons cast; Foreign West Indies, 5043 tons bar, 1646 tons cast; and to the United States, 21,336 tons bar, and 7149 tons pig. The largest quantity of unwrought steel has been to the latter place—viz., 1336 tons.

Of British hardware and cutlery, we exported in the year 17,183 tons, valued at 1,745,518l.; the principal of which has been—to Germany, 1237 tons, value 159,899l.; East Indies, 1402 tons, value 142,607l.; British North American Colonies, 1129 tons, value 102,260l.; British West Indies, 997 tons, value 93,040l.; Foreign West Indies, 657 tons, value 48,609l.; United States, 4292 tons, value 440,341l.; Brazil, 943 tons, value 80,070l.; and divers other places, varying from 100 to 500 tons.

We now come to copper. Of foreign copper ores, we have imported 55,729 tons; and of metallic copper, unwrought and wrought plates, and coins, 981 tons. Of the ores, the greatest quantities have come from Cuba and Chili; from the former 31,683 tons, and the latter 19,829 tons; 34,370 tons of this ore has been retained for home consumption, the net amount of duty received thereon being 64,445l. 3s. 5d.—The total of British copper exported, from twenty-three ports, was 17,515 tons, of which London sent 9469 tons, Swansea 4502 tons, and Liverpool 3507 tons; France took 4891 tons, the East Indies 8125 tons, and the United States 1473 tons. The total quantity of foreign copper exported was 672 tons. Of the above 17,515 tons of British copper, 9463 tons were unwrought, in bricks and pigs; 60 tons of coin; sheets, nails, &c., 8386 tons; wire, 6 tons; and other sorts of wrought copper, 597 tons.—Previous to the 9th of July, 1842, the whole of the copper smelted in the United Kingdom from foreign ore was but 282 tons.—Of foreign copper ore, containing not more than 15 per cent. of metal, we imported 14,083 tons, on which the amount of duty was 3460l., charged on 1733 tons of metal; under 20 per cent. and more than 15 per cent., 13,304 tons, duty 10,330l., charged on 2108 tons of metal; and, above 20 per cent., 16,969 tons, duty 49,630l., charged on 7719 tons of metal.

Our importations of tin have been as follows:—

Countries from whence imported.	Tons.	Cwt.	Qrs.	Lbs.
Holland	14	5	3	0
Gibraltar	0	1	0	0
East Indian Territory	192	7	0	26
Singapore	1111	7	0	19
Java	271	19	0	17
China	0	0	0	0
Peru	17	7	1	0
Total import of foreign tin	Tons 1609	0	1	0

We have exported 1819 tons of British, and 650 tons of foreign tin—of which France has taken 635 tons, Russia 400 tons, Italy 163 tons, Turkey 350 tons, and the remainder distributed among twenty-seven places.

Of foreign zinc, we have imported as follows:—

Countries from whence imported.	Tons.	Cwt.	Qrs.	Lbs.
Denmark	250	19	3	27
Prussia	2402	11	3	19
Germany	2078	1	3	11
Holland	20	1	3	1
Belgium	21	2	0	2
Spain and Portugal	1	13	0	14
Total import of foreign zinc	Tons 4773	9	3	13

Of this, we retained for home consumption 4191 tons, on which the net duty was 2431. 3s. 10d.; and we have exported 1391 tons of British, and 6445 tons of foreign spelter.

Of foreign lead, we have imported 2863 tons—of which 2775 tons were pig and sheet, 69 tons ore, and 19 tons white lead; 137 tons were retained for home consumption, on which the duty was 1656l.; and we imported from the Isle of Man, duty free, 3415 tons of lead ore. Our exportation of foreign lead amounted to 2439 tons—while of British, we exported, 176 tons of ore, 14,610 tons pig and sheet, 370 tons litharge, 767 tons red lead, and 1281 tons white lead—making a total of 17,604 tons.

Improved Tyres.—A patent has been taken out by Mr. J. Lenfesty, of Middletown, Dauphin County, Pennsylvania, for a tapped iron for carriage purposes, with a reversing, or vibrating, handle. The improvement consists of a vertical cast iron cylinder, about eight or ten inches in length, and from four to five inches in diameter, with a concave diameter at the upper end, that corresponds with and forms the bottom of the handle; this flange also projects inward, and constricts the opening in the cylinder to about two inches diameter; this aperture is regulated by a metal valve, the outer valve of cast iron, fixed on a rod that passes out in front of the cylinder (similar to a throttle valve), this valve regulates the quantity of fluid that passes the aperture when required, to prevent the small end of the piston from falling into the cylinder, which is provided with a stop-cock, that may be withdrawn when necessary to discharge the contents of the cylinder when they have accumulated in the cylinder. There is a hole in the cylinder for supplying from the side of the cylinder to receive the pipe of the [illegible]

ORIGINAL CORRESPONDENCE.

THE EFFLUX OF GASEOUS FLUIDS UNDER PRESSURE.

Sir,—I am surprised, and disappointed also, that Mr. Hood should have taken the course he has done in noticing my letter of the 20th ult. He says, I have confused the subject with questions of compression, density, engine power, friction, and many other matters—that he does not wonder that both theory and experiments should seem to me to be erroneous. This little attempt at ridicule I consider as more fashionable; and, as such, disregard it; but I am constrained to remark, in reference to my expression of disappointment, that the whole tenor of his letter conveys to me a desire, on his part, to pass by the question we are really at issue upon. This is not the line of conduct we expect a mathematician to pursue, but rather that a desire to elicit the truth should be manifested—and, secondly, that nothing in the remotest degree approaching to wordiness or subterfuge could be shown or entertained by an individual bearing that character. Mr. Hood says, "that in calculating the quantity of air that would be discharged through a pipe by a pressure equal to 4½ inches of mercury, it is not necessary to assume that the air is under any greater than atmospheric pressure, for it may be that the motion is produced, not by increasing the pressure on the air, but by diminishing the pressure 4½ inches at one end, while it remains at the usual atmospheric density at the other." This, of course, everybody knows—but, truly, it has nothing to do with the immediate question; my dealing was with data of his own supplying, taken from experiment the first, in which the discharge is air under a 4½ inch pressure of mercury into the common atmosphere.

Mr. Hood next brings himself to the following most extraordinary conclusion:—" Here, then, we get rid of all Mr. Thompson's doubts about expansion and contraction of the air, for there is neither the one nor the other in the case." And yet the whole theory of his paper, and the very basis of his illustrations, are founded upon, and constituted of, different densities of air! In both the notices of my letters, I am mixed up with the general subject of the paper, although I have distinctly stated (and which is undeniable) that my observations had nothing to do with his general subject, but were strictly and solely referable to the illustrations.

In the experiments adduced, he treats of air compressed to a density measured by a 4½ inch pillar of mercury, and discharged into the common atmosphere—to this I must beg to confine Mr. Hood, and pass by the passages extracted from his letter, as irrelevant to mine. You will have the goodness, Mr. Editor, I hope, to allow me once more to advert to the error I have charged on your correspondent. Mr. Hood gave an experiment made on a blast-engine, which compressed the air to a density of 4½ inches of mercury, and discharged it through tubes of the area of 5747 of a square foot, at a velocity (as stated by him) of 554 miles per hour. I have shown in my letter, that at such a velocity, through tubes of that area, and governed by a pressure of 4½ inches of mercury, the quantity discharged would be some other than 17,903 cubic feet per minute.

Again, I stated, that the common atmospheric air received into the blowing cylinder of the engine, as given by him—viz., 14,736 cubic feet, after the supposed compression, would yield only 12,517 cubic feet, and cause a velocity of 147½ miles per hour. Calculating by the formula he adduced, Mr. Hood has shown, that an equivalent pillar of the atmosphere would cause a discharge of 17,903 cubic feet of air per minute, at a velocity of 554 miles per hour—that is to say, that this quantity and velocity is theoretically producible through the tubes alluded to above. Now, I have demonstrated, that his experiment yielded only 12,517 cubic feet of air of corresponding density, in the same time, and at a velocity of 254½ miles per hour; and I assert, that neither the experiment, nor the theoretical calculation of Mr. Hood, have anything to do with the question of friction, for, whether his pipes were 100 feet or one inch in length, the result of his hypothetical operation of figures would be the same. Thus, then, the nearest approach of the experimental result to the theoretic is 12,517 : 17,903; and, however Mr. Hood may endeavour to divert attention from this fact, by a course of observations inapplicable to the matter brought forward by me, I must maintain that this is the nearest approximate aid he is entitled to.

B. THOMPSON.

Newcastle-on-Tyne, May 9.

SANTIAGO MINING COMPANY.

Sir,—In your last Number you offered some explanation of the circumstances which have led to the great depression in the prices of Santiago shares, and to their late rise. I have since seen the reports; and it is now clear that the mine is far more valuable than at any former period, and is quite independent of the ground in dispute between the two companies of Santiago and Cobre. My object, however, in addressing you is, to call the attention of the shareholders in both these companies to the ruinous expenses to their interests, as well as to the absurdity, of legal proceedings in a foreign country between two sets of English mining adventurers.

Without going into the merits of their respective claims, it is quite manifest that the success of either party will depend upon the length of their purses. It is more than suspected that the late decision in favour of the Cobre Company was obtained at an immense sacrifice of money; and that, if the question be ultimately referred to Madrid, the Spanish lawyers and judges will get the whole value of the ground in dispute.

What is the remedy?—Let there be a joint meeting of persons who are shareholders in both companies, and let them compel the directors to refer the matter to arbitration here; two English Equity lawyers, aided with the advice of a Spanish lawyer, acquainted with the laws of the Minerals, in Spain, would soon settle the dispute—or, let the directors meet, and compromise on both sides. Why not work the ground claimed by each on joint account? I understand it to be worth 150,000*l.*, though of very limited extent. Brother shareholders,—Meet, and appoint delegates on both sides, to protect your interests.

It is said, that the Cobre directors have no power to interfere—that they are in the hands of parties in Cuba, who are interested in keeping up legal proceedings, and who will listen to no measures of peace—who live to settle, and profit by it. Looking at the parties who are directors of the Cobre Company themselves, I am at a loss to understand how such respectable men can allow themselves to be governed by the interested advice of their agents in Cuba. Their proceedings are too mysterious to be satisfactory. Where there is concealment, depend upon it there is something wrong; and it is the duty and interest of the shareholders to demand explanation.

London, May 13. ARGUS.

NEW THEORY OF NATURE.

Sir,—Before entering into particulars with regard to the "New Theory of Nature," alluded to in my last two communications, inserted in the *Mining Journal* on the 20th and 27th ult., as an introduction to the subject, I should feel particularly obliged if some or any one of your scientific correspondents would investigate the theorem, as to the existence of two things only, and state whatever objections, fatal or conditional, may appear to stand in the way of a full admission of the truth of my assumption—because, upon the foundation that there are only two things existing, as elements in the composition of what are termed natural things, the whole "Theory" will be built, and fully developed; and, therefore, if what has been stated in the "Introduction" can be shown to be erroneous, it would be only a waste of time, and a useless occupation of your pages, to go on with the subject.—Ninthpath, *May 11.* S. D. ROGERS.

VENTILATION OF MINES.

Sir,—Although I do not consider myself called upon to offer any reply to the gratuitous misapprehensions of Mr. Murray, which appeared in your last Number, I think it may be well enough to state what took place here regarding Mr. Ryan's visit in 1839.

In September, Mr. Ryan, accompanied by Mr. Stabille, visited Hetheron Colliery, which was considered the worst fiery in the district; but the account of his invention he did not disclose.

On the 7th a general meeting of coalowners, at one of Mr. Ryan's friends, took place, at which Messrs. Stabille, Hick, and Hodgson, were appointed to examine certain collieries at Dunlap, at which Mr. Ryan's system was adopted in its full operation. In the mean time, the meeting named Mr. Ryan a subscriber of ten guineas per week.

On the 16th the meeting was assembled, the report read, and resolutions passed to the effect, "That no system of Mr. Ryan's was applicable to the coal mines of this district."

From these, and the reasons from whence I draw my deductions, and, with regard to the discrepancy between the above report and the correspondence lately published, it is my opinion of value to doubtless to avoid unnecessary lengthy communication to me to set up my own opinion in opposition to this other mentioned high authority. I will, therefore, content myself by advising simple questions:—Does any well-informed ordinary coalowner entertain the idea that the "system" of Mr. Ryan can in any manner be effectually employed in the coal mines of Northumberland or Durham?

Until, therefore, a satisfactory reply be furnished by a competent person, I shall remain perfectly satisfied of my position, whatever an uninformed volunteer in coal mining, like Dr. Murray, may please to publish.

Newcastle-on-Tyne, May 15. MATTHIAS DUNN.

VENTILATION OF MINES—FIRE-DAMP.

Sir,—Your correspondent "B. B." (Rotherham) must have very much mistaken me if he supposes I considered the black or choke damp of coal mines inflammable. I am quite aware that an admixture of atmospheric air will render it explosive; it is, in fact, anti-inflammable. I am never apprehensive of much danger from black damp; keep up a good ventilation throughout the mine, and it will give but little trouble. I believe I can say more than many, as manager of a fiery coal pit for nearly half a century—viz., that during that period not one individual has lost his life under my management. Your correspondent accounts for the variation of the purity of the air in mines by the irregularity of atmospheric pressure—" When the barometer is high (he says), the atmosphere has a greater tendency to retain the gases of mines in the fissures; and when the barometer is low, the pressure is reduced, and the gases, by their elasticity, escape, in such quantities as to render the air explosive." I grant this opinion somewhat correct, but not to the extent, one way or the other, he supposes; and would not my purifier much reduce those barometrical differences in the current of air passing through the mine, and establish regular data for the miner to depend upon?

I should be exceeding glad if some men of science and experience would discover a remedy for the prevention of the sudden calamities which happen to fiery mines; I have given one plan—but should be pleased, indeed, if "B. B.," or any other person, would produce a better. At the last accident in the north of England, when about twelve persons lost their lives, from the enclosure on the inquest it appeared, that some colliers who left the pit only two hours before the explosion considered it as pure as it had been for months, which shows how suddenly, from an eruption of gas, the mine will reach the fiery point; and this evil no scientific plan can ever reach, but must be left to the care and discretion of the persons having the conduct of the mining operations. Wherever the coal is taken away, there is a settling down of the strata above, but not to a very great height, leaving a space, in which the strata above, but not to a very great height, leaving a space, in which the strata above, but not to a very great height, leaving a space, in which the fire damp accumulates; and, as the workings extend, the upper strata settles down also, and forces the gas into the workings—perhaps thousands of cubic feet in half an hour; and on these dangerous occasions, there is nothing can be of any service but sound practical knowledge, close attention, and prompt exertion in getting all the men out of the workings until ventilation is again restored.—*Manchester, May 10.* T. DEAKIN.

SHIPWRECK—LIFE BUOYS AND SWIMMING-BELTS.

Sir,—I quote the following paragraph from a Hull paper:—" The entire crew and passengers, upwards of 300, that were on board the emigrant ship, *Amity*, when she was wrecked during a hurricane, on the 31 January, on the reef of the Mauritius, were saved by means of one of Carte's (not Andrew's) life buoys, which were purchased in Liverpool." The above communication is highly gratifying, but I think the individual who penned it had an ominous propensity to put a parenthesis "not Andrew's," because it was adding more than what was required, and appears intended to put our townsman's (Mr. Andrew) inventions rather into the shade; whereas, I consider that one of Andrew's cork swimming-belts, at 10*s.*, being made the means of saving the lives of upwards of 100 individuals belonging to the *Trafalgar* brig, wrecked off the Cape of Good Hope on the 21st February, 1839, was accomplishing more in proportion than two of Carte's buoys at 30*s.* each; for, when the difference of cost, together with the much less space occupied by the belt, are taken into due consideration, there is, undoubtedly, a very great disproportion in favour of Mr. Andrew's swimming-belt. R. MEIKLE.

Manchester, May 13.

ON THE WEAR OF CAST-IRON RAILS.

In the February Number of the *Journal of the Franklin Institute* is an article on the above subject, in continuation from a former Number, by C. Ellet, Jun., Esq., C.E., which we have already noticed. In the present one, the author observes, that the prevailing errors in all writers on road policy arises from their opinions being the pictures of their hopes, and are rarely deductions from extensive and systematic investigation and wide experience. In consideration of his subject, some curious statistical facts are developed in respect of the cost and extent of goods' traffic on railways, as compared with canals. The public, he says, have not yet become accustomed to compare the actual weight of the trade which is transmitted along existing lines of railroads, and that which passes coincidently through the old canals, and there are, consequently, few who have yet formed a just conception of their relative magnitudes. For instance, the London and Birmingham Railroad has already cost upwards of six millions sterling, and formed for the heaviest traffic, but the speed offers slight compensation for the price at which it is purchased—and, with all the labour, and all the outlay to reduce the cost of transportation, the amount of tonnage on it does not exceed five or six works' trade of the Schuylkill navigation. The Great Western road has cost about six and three-quarter millions sterling; the tonnage on this is less than the Birmingham, and does not reach 130,000 tons per annum. He then comes to the investigation of the wear of the iron rail with such light traffic. The London and Birmingham Company commenced with a rail 50 lbs. to the yard, which was worn out long before finished. The Great Western, with one 66 lbs. to the yard to Maidenhead, was rendered quite useless more than a year since; the heavier (75 lbs.) iron they are now using is, of course, not entirely destroyed, but no expects, in another year, that a great portion of those will be destroyed under less than 500,000 tons each. Although little has been added to our previous knowledge, as to the comparatively little wear and long duration of edge rails, the following facts are worthy of record:—1. That eight or ten new lines, from already known data, to dedicate.—1. That eight or ten lines in America have worn out common half inch flat bar, with an average aggregate trade of 150,000 tons each. 2. The Camden and Amboy road has been in places worn out with an edge rail weighing 40 lbs. per yard, with less than 400,000 tons each. 3. The edge rail on the Columbia road, 35 lbs. per yard, is destroyed with less than 350,000 tons. 4. On the Boston and Lowell road, a 28 lb. rail was so much injured, as to render it unsafe to travel over, and replacing before it had sustained the passage of 600,000 tons each. 5. The Liverpool and Manchester road was opened in 1830; in 1833, two tracks of edge rails, weighing 35 lbs. per yard, were laid over part of the road between Liverpool and Manchester, and renewed in that time with less than 600,000 tons on each track. 6. In 1835, this company relaid their line with rails 50 lbs. to the yard; before the close of 1840 these new rails were worn out by 700,000 tons on each track, and rails of 64 lbs. substituted, so that in nine years three successive lines of single tracks were destroyed by a traffic of 300,000 tons each. 7. The 64 lbs. rail introduced on this road were found to be too light, and a 75 lb. pattern substituted; these 75 lb. rails have already begun to give way in removed places; the injury showing itself chiefly in lamination, and occasional splitting at the edges. 8. The Stockton and Darlington road, considered as a single line, has been relaid with edge rail from six to eight times, with an average traffic of 6,500,000 tons, while the rails on this road are very light, and the velocity but six miles per hour. These are facts, and facts are experience, and the reader is left to judge whether, under such circumstances, the cost of renewing iron ought to be regarded as one of the current expenses, or as a thing so extraordinary as to be properly excluded from the annual charges altogether, and added, as is now the universal custom, from year to year to the cost of the road. He then goes into some calculations as to the cost, the quantity of old iron raised, and value in proportion to the new required. Although it seems inconvenient, the weight of the old has been calculated as equal to the new, the very property says, you cannot spread 24,000 tons of iron along a road 100 miles in length, and lose and roll them for one or two years, and collect it all again, but one you replace 1 40,000 bulks and 10,000 chairs when once distributed. The author then proceeds to give tabular matter for the calculation of expenses of new lines, or relaying rails, which formerly he has found in practice true and correct, within from 1½ to 4 per cent. of the estimates. He concludes, by stating that he has expressed his opinions on an important subject, without reserve or concealment, and requests that should any of his professional brethren dispute these facts, they will acknowledge it by their name and address, that he may have a guarantee for the facts they contradict.

NEW GAS MANUFACTURING APPARATUS.—We understand that Messrs. Cowlan and Smith, of Nottingham, have obtained a patent for an apparatus for the production of gas from any fat which is kept in common use, such as a kitchen grease, &c., but is more applicable to steam engine or other large furnaces, by which gas to any extent may be generated, for the purposes of illumination, at no expense beyond the original cost. We are informed by one who has seen the apparatus in action, that it is exceedingly simple and unexpensive, and calls but to supply this now necessary article of consumption at a price far below what it can be produced for from the common coal. We trust we shall be enabled, in a future Number, to give a description of this domestic gas manufacturing machine.

MINING CORRESPONDENCE.

ENGLISH MINES.

ROYALBACK MINING COMPANY.

May 15.—An account laid on the mine of profit and loss for Jan. and Feb.:

Labour cost	£ 330	5	9
Merchants' bills	69	12	3—400 17 9
Balance in hand	£331	1	3
Copper sold February and March	£737	19	7
Lords' dues	144	18	3—£882 4 3
Tin sold	129	13	11
Dues	16	0	0—289 13 2—£1172 0 5

Showing a profit of 1045*l.* 3*s.*; from which deduct 1000*l.* for a dividend of 10*l.* per share, leaves a balance of 45*l.* 3*s.*

N.B.—The deep levels in this mine are improved.

HOLWATER MINING COMPANY.

May 13.—In the 120 fathom level, west of Hitchins's shaft, the lode is fourteen inches wide, and worth 12*l.* per fathom; in the rise in the back of this level the lode is eighteen inches wide, and worth 20*l.* per fathom; in the stopes west of Michell's winze the lode is ten inches wide, and worth 16*l.* per fathom; in the stopes east of ditto the lode is fourteen inches wide, and worth 20*l.* per fathom; in the stopes west of Lobb's winze the lode is two feet wide, and worth 30*l.* per fathom; in the stopes east and west of Goldsworthy's winze, on the south lode, the ore part is about ten inches wide, and worth 15*l.* per fathom; in the eastern winze, sinking below this level, the lode is one foot wide, and worth 18*l.* per fathom; in the western winze the lode is fourteen inches wide, and worth 12*l.* per fathom. In the 100 fathom level, west of Hitchins's shaft, no alteration; east of Michell's winze the lode is ten inches wide, and worth 9*l.* per fathom; east of Wall's shaft the lode is small and poor; the Flapjack lode, at this level, is two and a half feet wide, composed of copal, spar, and mundic; in the eastern stopes, in the back of this level, the lode is fifteen inches wide, and worth 18*l.* per fathom; in the stopes east of Hooper's rise the lode is fourteen inches wide, and worth 18*l.* per fathom; west of ditto the lode is fifteen inches wide, and worth 18*l.* per fathom. In the cross-cut in the ninety fathom level the ground is favourable for driving; in the stopes in the back of this level the lode is one foot wide, and worth 11*l.* per fathom. In the eighty fathom level, east of the south cross-cut, the lode still continues to produce stones of ore. T. RICHARDS.

BEDFORD UNITED MINING COMPANY.

May 14.—At Wheal Margaret the sinking the engine-shaft is still progressing satisfactorily in favourable ground. In the forty-seven fathom level west the lode is two and a half feet wide, composed of gossan, spar, and ore, worth about 7*l.* per fathom, expecting to cut the cross-cut in driving about two fathoms further west, and the rich ore ground immediately to the west thereof, as met with, gone through, and still holding good in the thirty-five fathom level above; in the cross-cut east at this lode we have not yet cut the lode, but are daily expecting to do so. In the thirty-five fathom level west the lode is two feet wide, and still worth 30*l.* per fathom; in the thirty-five fathom level east the lode continues unproductive; the lode in the sump winze, sinking below this level, is about two feet wide, worth 9*l.* per fathom. The pitches are without alteration. At Ding-Dong the lode in the engine-shaft is about two feet wide, composed of spar, mundic, and ore—altogether, a very promising lode indeed. At Deives Kitchen, in the winze sinking below the adit level the lode is looking kindly, being upwards of two feet wide, carrying strong mundic, spar, and iron, but as yet containing but a small proportion of ore. JAMES PHILLIPS.

COOK'S KITCHEN MINE.

May 11.—North Tincroft lode, in the sixty fathom level, is three feet wide, worth 20*l.* per fathom—ground favourable, but we have not got the south wall as yet. In the fifty fathom level east the lode is three feet wide, but unproductive at present; in the pitch in the bottom of the fifty fathom level, west of the shaft, the lode is seven feet wide, worth 30*l.* per fathom; the pitches in the back and bottom, west of the shaft, are rather improved since I wrote you last, and our prospects in this part of the mine are looking very encouraging. Hosley's lode, in the seventy two fathom level east, is two feet wide, worth 4*l.* per fathom. In the new cast shaft the lode is four feet wide, worth 14*l.* per fathom. In the 170 fathom level, on Dunkin's lode, driving east and west of the winze, the lode is four feet wide, worth 15*l.* per fathom for tin, ground very favourable, and scarcely any water. In the 160 fathom level, on this lode, we have got clear of the cross-course, and have the lode four feet wide, worth 18*l.* per fathom for tin. We have commenced sinking the south sump shaft under the 160 fathom level, the lode being six feet wide, looking very promising for tin. In the 150 fathom level, east of south sump shaft, the lode is four feet wide, but rather poor at present. A. KUSBY.

GALLENFORD MINING COMPANY.

May 13.—The ground in the north engine-shaft continues favourable for sinking, and is much improved in the cross-cut towards the lode at the seventy fathom level. In the sixty fathom level the lode is also inches big, producing some good work for silver-lead ore. In the fifty fathom level the ground continues favourable for driving, and lode productive, leaving good back and bottom. In the forty fathom level the lode is split in branches. At the south winze the ground in Johnson's engine-shaft is favourable for sinking below the eighty fathom level; at this level south the lode is one foot big, producing silver-lead ore; in the north end the lode is one foot big, good work. In the seventy fathom level south we are opening tribute ground. The railroad at surface is now being laid from north to south mine.

J. T. PHILLIPS.

UNITED MILLS MINING COMPANY.

May 10.—In the seventy fathom level, east of Williams's shaft, the lode is three feet wide, one of fair quality, worth 20*l.* per fathom; west of ditto the lode is four feet wide, producing but a small quantity of ore. In the sixty fathom level, east of eastern shaft, the lode is three and a half feet wide, very throughout, of low quality, worth 6*l.* per fathom; west of ditto the lode is two and a half feet wide, eighteen inches producing ore, worth 7*l.* per fathom. In the diagonal shaft, sinking under sixty fathom level, no lode broken to the north end of the lode; we are sinking to the country to the north of the lode, and shall continue until we lode in the seventy fathom level. In Webber's winze, sinking under sixty fathom level, the lode is five feet wide, two feet on the north part good ore, worth 24*l.* per fathom. In James's shaft, sinking under ditto, the lode is five feet wide, very throughout, of a coarse quality, worth 10*l.* per fathom. In the fifty fathom level, east of eastern shaft, the lode is three feet wide, producing stones of ore. In the thirty fathom level ditto the lode is fifteen inches wide, six inches ore of good quality, worth 5*l.* per fathom. In the ten fathom level ditto the lode is two feet wide, with a promising appearance, producing but little ore. At Wheal Spencer, in Gibson's shaft, under the forty fathom level, the men have taken to sink this shaft seven fathoms for 11*l.*, which will bring it down to the fifty fathom level; in the cross-cut, south of ditto, the ground is rather improved for driving. In the winze, under the twenty-five fathom level east, the lode is two feet wide, poor. In the twenty fathom level east, on Stacey's lode, the lode is two feet wide, fifteen inches ore of good quality, worth 30*l.* per fathom; in the twenty fathom level west, on ditto, the lode is eighteen inches wide, one foot ore of good quality, worth 12*l.* per fathom. In the cross-cut, south of Taylor's shaft, 40 the twenty fathom level, we expect to cut Stacey's lode in driving about two fathoms more. In the ten fathom level east, on Stacey's lode, the lode is two feet wide, eighteen inches good ore, worth 30*l.* per fathom; in the ten fathom level west, on ditto, the lode is one foot wide, six inches ore of average quality, worth 8*l.* per fathom. In Williams's engine-shaft an adventure above last reported. T. TREVARREN. N. LANYON.

WEST WHEAL JEWEL MINING ASSOCIATION.

May 13.—There is no alteration to either of the cross-cuts since our last. In the eighty-five south, or 180*n* cross course, we have intersected Wheal Jewel lode in the past week—the lode is lowest one foot; the south lode is worth 10*l.* per fathom; we are driving on the lode, and are daily expecting to cut the principal lode of the cross-course; the lode in the eighty-five fathom level west is still worth 10*l.* per fathom. In the seventy fathom level west the lode is one foot wide, containing stones of ore; the lode in the winze, sinking below this level, is now worth 12*l.* per fathom. Buckingham's lode, east of Hodge's cross-course, at the fifty seven fathom level, has not been taken down in the past week. At the thirty fathom level, west of Hodge's cross-course, on Mercoweth's lode, we have cut through the lode; its average size is two and a half feet wide, composed of spar, prian, mundic, and sparks of ore, but it is disordered, being near the cross-course. In Williams's engine-shaft, sinking below the deep adit, the lode is three feet wide, much the same as last reported. Nothing new to say other part of the mine.

STEPHEN LEAN.

CROFT HEAD MINING COMPANY.

May 11.—The lode in the seventy eight fathom level, driving west of Murray's engine-shaft, is two feet wide, and still producing some good work for tin; the men have nearly completed the white plank at that level, when we shall again drive east on the course of Chevalier lode. The seventy fathom level, west of Murray's shaft, is yielding some good stones of lead, and the ground is favourable for driving; same level, driving east of great engine-shaft, is presenting more encouraging appearances than for some time past; the lode is large, and composed of spar, prian, mundic, and lead. The sixty fathom level, driving north of old engine-shaft, is in very ground; the end is very soft, and we expect to cut the lode shortly. The sixteen fathom level east, at Clidhall's, driving north-east on the counter, is still having end a little hard. The sixth level, driving north, is in a soft killas country; driving the adit west, at Knowlegrave, we have a large producing lode, and producing the adit west, at Knowlegrave, we have a large producing lode, and producing level at intervals; going north the ground is evident any alteration since last week's report—appears as favourable for driving to. The ore shall in this part is much less fortunate before the adit; the ground is a firm killas, and of a kindly character; the entire lode is but small for tin.

J. WEBB. S. HOWE, Jun.

TRELAWNY CONSOLS MINING COMPANY.

May 12.—In the eighty east at Christow the lode is from eighteen to twenty inches wide, worth 40*l.* per fathom. In the winze below the seventy the lode is eighteen inches wide, producing some good ore. The sixty east of Gordon's is suspended for the present. At Great Fortune, below the sixty the lode is still large, with some ore, but not of much value. The lode in the sixty west is the same size as last reported, but more kindly; the lode in the sixty east is from two to three feet wide, with good stones of ore. The lode in the fifty west is two and a half feet wide, worth 15*l.* per fathom; in the fifty east no lode has been taken down since last reported. In the forty-four rise against the new shaft the lode is two and a half feet wide, worth 6*l.* per fathom.—We intend sampling to-morrow about 210 tons of ore. The best parcel will be above 60 tons, worth, we think, nearly 12*l.* per ton; our other parcel, 76 tons, we calculate a pretty good one; the 75 tons much the same as the average of Tavleigh ores.

W. SYMONS.

LEWIS MINING COMPANY.

May 13.—My report this week cannot contain anything particularly new. We are still driving the cross cut towards Wheal Providence lode, in the eastern part of the mine, through a beautiful strata of white killas, with flecks of green carbonate of copper, which we take as a favourable omen of what the lode is likely to be; we are also driving a cross-cut south in the western part of Treva, towards Kenney's lode, through a similar channel of ground as described above—similar results may, therefore, be calculated on. We did intend ere this to commence driving a cross-cut south towards Wheal Providence lode, in the eastern part of the mine, but we find, by dialling, that the adit end is not quite forth to the shaft we intended to bring down on it; we therefore continue the adit east. The lode in the adit has a very promising appearance, but we do not calculate on much ore as shallow; some men, however, are still raising a little ore from the back of the adit—though not the same men who sold some ores at the tickatting on the 9th inst., who, after dressing their ores in two piles, keeping the good from the 'bad, at the close put the bad with the good, and thereby spoiled the whole, and are now (too late) lamenting their folly. Such an error at the commencement may be the means of preventing greater errors as we advance. The prospects of the mine, however, cannot be affected, as some person (not a friend) tried to insinuate at the tickatting, by the sale of a little ore from old two-thirds pitches in the back of the adit, and that not from the lode, which was our main object from the commencement. The engineers are getting on very well with the engine—the heaviest parts are fixed in their places, such as bob, bailer, cylinder, and case, with some other parts. We hope to get to work by the middle of next month.

S. NORTH.

GREAT WHEAL MARTHA CONSOLIDATED MINES.

May 11.—I have to inform you that the lode in the sixty fathom level east is now four feet wide, composed of muudic, capel, and copper ore; going west it is very much improved, being five feet wide, two feet of which is saving work, and altogether a very kindly lode, indeed. In the fifty fathom level west the lode is four feet wide, composed of muudic and capel, with good stones of ore, and presenting a very kindly appearance. In the forty fathom level west the north lode is five feet wide, composed of spar and muudic, and very throughout. In Spargo's winze the lode is four and a half feet wide, 1 ft. 6 in. of which is saving work. In the adit level west the lode is about two feet wide, yielding saving work. I am happy to say, that the ends are greatly improved since my last report. At the new mine, Thomas's shaft is now sunk seven fathoms under the adit—ground favourable.

THOMAS PENALUNA.

TAMAR SILVER-LEAD MINING COMPANY.

May 13.—In the 135 fathom level the lode is about eighteen inches wide, producing ores of a promising description. In the 125 fathom level the lode is nine inches wide, producing some ores, but not rich. In the 115 fathom level the lode is two feet wide, producing good work. In the 105 fathom level there has no lode been broken since my last report. In the ninety five fathom level the lode is one foot wide, composed of capel, with some good work for silver-lead ores. In the eighty five fathom level the lode is eighteen inches wide, coarse at present. In the seventy five fathom level the lode is one foot wide, composed of flucr-spar, interspersed with silver-lead ores. In the sixty five fathom level the lode is just of the same size and quality. In the fifty five fathom level the lode is nine inches wide, poor at present. The forty five and is in sixty ground, and unproductive of ore. In the thirty five fathom level the lode is six inches wide, producing ores in a soft spar. The incline shaft is still in a favourable way of sinking. In our tribute department we are looking much as usual, and we sold, on Saturday last, 100 tons of silver lead ores, at 18*l.* per ton. At the south mine the compressors are getting on very well with sinking the engine shaft. In the forty fathom level, driving south, the lode is nine inches wide, poor; in the end driving north, at this level, the lode is fifteen inches wide—two branches containing a small quantity of silver-lead ores. In the thirty fathom level, south of the shaft, the lode is rather disordered for the present; in the same level, driving north, the lode is one foot wide, of a promising character, and producing some good work for silver-lead ore. At Wheal Hancock the engine shaft is about fifteen fathoms below the surface, and the ground still continues favourable for sinking.

JAMES SPRAGUE.

TINCROFT MINING COMPANY.

May 13.—We have commenced driving east and west at the eighty fathom level; the lode in the east end is two feet wide, worth 20*l.* per fathom; the lode in the west end, same level, is in a disordered state by means of cross branches. The lode in the seventy east is large, producing coarse quality ore; the west end, same level, is two feet wide, worth 15*l.* per fathom. We are now driving a cross-cut north from the sixty east towards north Tincroft lode, gone off in that direction. The sixty end west, which has passed through some hard unproductive ground, is now improving in appearance. The fifty west, with the pitches in the back of it, continues to look well. The forty west is producing some ore and very promising; other places remain stationary.

W. PAUL.

CONSOLIDATED TREFOIL MINING COMPANY.

May 13.—The lode in the fifty fathom level, west of Williams's shaft, is eight inches wide, tributo ground. We have suspended the fifty fathom level, east of Heawood's shaft, until a rise be holed for ventilation; the lode in the rise, in the back of this level, east of Heawood's shaft, is eight inches wide, producing some good ore. The lode in the forty fathom level, east of Heawood's shaft, is one foot wide, tributer ground.

H. WILLIAMS. J. MORCOM.

HAWSON MINING COMPANY.

May 13.—Since my last report we have cut the lode at the thirty one fathom level; it is twenty inches wide, composed of muudic, capel, and spar, with some copper ore; our engineers are now engaged rising against the whim shaft. The lode in the twenty one fathom level east is about two feet wide, producing some good quality ore, and very promising; the lode in the twenty one fathom west is fourteen inches wide, and has a more promising appearance than when I wrote last. The lode in the twelve fathom level east is at present small and unproductive. The lode in Gordon shaft, under twelve fathom level, is two and a half feet wide, composed chiefly of muudic, with some good quality copper ore. At Truro we are sinking Stalworthy's shaft under the adit, and if Stalworthy's lode underlies south as we expect, we shall soon get down on it, and shall see whether the underlay per fathom, as well as the quality of the said lode as it goes down. We are still driving Truro adit north, but have not seen any other lode as yet.

E. WILLIAMS.

FOREIGN MINES.

BRAZILIAN COMPANY.

Cata Branca, *March* 5.—You will observe that the mining captain's report alludes to a line which has just come in to the rump shaft. I am in hopes that this line may lead to something good, as since its appearance the produce has decidedly improved; and if this work ends as it has begun, it will be the best we have had for many months. The St. Antonio lode, I am happy to say, looks more promising; some ore broken there yesterday in equal to appearance to any ever turned out of Cata Branca.

E. HARRIS.

Gold returns for the week ending March 1.—6 lbs. 14 dwts. 6 grs.

REAL DEL MONTE MINING COMPANY.

Mineral del Monte, *March* 14.—I beg herewith to hand you the duplicate of my letter of 10th ult.; since that date the La Luz workings on the Santa Brigida vein have somewhat improved, and are at present supplying the principal portion of smelting ore for the furnaces; the San Pedro level has passed altogether through about eighty varas of ore ground, and in the bottom part of the present end there is still some of very good quality; there the ore ground now laid open in this part of the mine we may calculate with a tolerable degree of certainty on raising about 300 cargoes per month for the next two months, of which about one third will, probably, be smelting ore; the lay of these ores has also much improved. The cross cut at the Arvenero adit level from San Pedro shaft has passed through the Arvenero vein, which is altogether about three varas wide, one-half vein of which is smelting ore, ranging from 40 to 50 ounces per marco; it continues, however, very little of the best class of smelting; the character of the vein in this place is decidedly superior to that which is seen at the eighty-two and 100 vara levels; its white appearance is promising, and I think it very probable we shall find some new bunches of ore on the lower counter to those found above. At the opposite the forty vara level north has been passing through an opposite body of 2 to 3 metres per metallica, with horizontal branches of a better lay; the latter is cleared and sent to the hacienda, but the former, for the present, remains unwrought. The water in the bottom workings of this mine and of La Luz has, for some time past, remained nearly stationary, but we dare say it will lower soon, when the eighty one vara level east of Arvenero receives the Santa Brigida vein, which it will, probably, do in a few weeks more.

March 19.—The general prospects of the mines have not materially changed since the letter of the 14th inst. The sinking of the fifty vara level west of El Arte winze, and east of San Francisco shaft, has gone on very well; in the former forty-seven and a half varas, and in the latter sixteen and a half were made good during the last four weeks, leaving about forty-five varas to communicate, which will be completed in about four weeks more. Near the end of the level west of El Arte there are old workings extending below the bottom of the level, but these we shall not be able to examine until the clearing of the level is finished. I regret to state that up to this time no ores have been discovered to realise the expectations that were entertained, but in about another month we shall, probably, be enabled to give a more decided opinion as to the future prospects of this mine. The adit clearing west of San Francisco shaft has reached a cross cut driven north at about thirty varas east of Dino to Guio shaft; it is reported that good ores were being extracted from a north lode at this place, when the miners were last abandoned; the cross-cut is nearly full of rattle, and the old workings are cramped together, so that it may occupy some weeks before we are able to make a proper examination. The workings above Esperanza level are still yielding sangue ore; the lode continues large and promising, and when the communication is made between the rise over Esperanza and the Santa Rosa level from Reasarin, we shall be able to increase the raising of ore. At Terreros the rise above Taylor's level has lately improved a little, and the last half vara produced thirteen quintals of smelting ore, besides the sangue. When this place is holed to the planes of San Alfonso, which will be in about five or six weeks more, we shall be enabled to put more men on the stopes and increase the quantity of ore; and as about the same time the Avinero cast will be communicated to the part driving west of San Capetano, the proposed alteration in the pitwork, described in a former letter, will be carried into effect; after which we shall proceed to cut into the south part of the vein, which will, probably, let down the large stream of water at present flowing from the Socurro level. The south part just alluded to we hope to find the most productive. The total produce from this district for last month amounted to 3130 quintals of sangue and 310 smelting ore. In my letter of 28th Feb. I mentioned that we had arranged to drive the ground south of Dolores on the Santa Brigida vein. This has been since done, and the driving of the old adit in that direction resumed, and it is very satisfactory to observe that the lode has lately shown decided symptoms of improvement; a few days ago some bags were brought up, the rough of which assayed 90 marcs per montos, and the small 16 marcs; the most inferior class assayed 10½ marcs; the lode is large, and the ground easy for driving, so that we shall quickly explore the vein for a great distance. If these favourable appearances continue, we propose to resume the driving of the 137 vara upper level, both for the purpose of making trial of the vein, and providing means for ventilating the workings as they proceed south; it is true we have not yet seen much, but there is every reason to expect we shall find a good deal of ore in this neighbourhood. The new mine is to be called San Ignacio. At Sacramento the quantity of ore raised during the last four weeks amounted to about 400 cargas; the greater part is sangue, assaying from 10 to 20 marcs per montos. La Luz continues to be a productive mine, and, during the last four weeks, yielded 800 cargas of sangues, and 400 of smelting ore; the former contains from 15 to 18 marcs per montos, and the latter about 5 marcs per carga, and from the ore ground now laid open, we may calculate upon a produce of 300 cargas per week for two months longer. At Acosta the quantity of ore raised continues to be very small, the last four weeks having produced only 200 cargas of sangue, and forty three of smelting ore; I hope, however, we shall soon be enabled to increase this amount, as the San Antonio, or eighty one vara level, has lately cut parts of the Santa Brigida vein, which has let down the water from San Guillermo winze, the sinking of which was resumed a few days since; the water, by this means, has also been lowered in a part of La Luz workings, but those situated furthest south, and the deep winzes of Sacramento have not yet been effected. In the cross cut from San Pedro shaft, at the level of the Arvenero adit, the vein is seen upwards of three varas wide, on which we are now driving east and west; in the former direction it is poor, but in the western end there is good sangue ore, about one-half vara wide, in a kindly looking vein. In the new mine of Rosario we are working two points—driving the fifty-seven vara level east, and at the same level a cross-cut south at four varas from the end; in both places the vein is spotted with ore, and producing nearly sufficient to pay the expenses; the driving of the cross cut is for the purpose of ascertaining the width of the vein, and examining the south part.—[The remarks accompanying the statement of costs and returns were published in last week's *Mining Journal*.]

Costs for February, (four weeks), £37,282 9*d*; returns, £44,354 1*d*—loss, £12,926.

ALTEN MINING ASSOCIATION.

Mining Report and Estimates of Ore for the months of February and March.

ESTIMATES OF ORE.

Mines.	Men.	Fathoms.	Produce.	Total.	Per cent.	Copper.
Raipas	79	40 0	4 0	120 0	10 0	12,000
United Mines	45	26½	2½	30 0	4 0	2,400
Wilson's	22	12½	1½	30 0	2 0	1,200
Ryans	50	22½	1½	30 0	2 0	1,200
Quarry	26	20.3	2 0	70 0	10 0	7,000
	144	132 4		330		23,800

Mining Report.

Alten Copper Works, *April* 13.—Owing to the interruptions consequent upon the transition from the winter to the summer pool, a longer period than usual has elapsed since our last report; that was, however, as ample, as in some measure to have compensated for the delay that has intervened, and to have anticipated questions you may have been anxious to get answered. In resuming our report, we must cause reference to various prospective details we then entered into, and which have since been acted upon.

Raipas.—This mine preserves its uniform character; if a falling off in produce is perceptible one month, it is generally made up by increased returns the next. Judging by present appearances, there is no cause to question the results Mink has encouraged you to expect.—In bargain No. 1, which is going towards the lode, cut in the cross cut, is two feet broad, richly sprinkled with the purple ore, and estimated to give about two and a half tons of best dredge to the fathom. Bargain No. 2 is the cross cut on exploration; a change of ground has been gradually taking place with occasional patches of quartz, which give us some hopes that we may be again approaching a branch or deposit of ore. Bargain No. 3, on lode in cross cut, is irregular and touchy, the ore, however, is of the rich purple quality, and at present is returning about three tons ore of the average per sandage to the fathom. Bargain No. 4 is on the same lode, and in every way similar in character and produce to No. 3. Bargain No. 5 is the level driving to come under shaft No. 1; it is still in the country, but expected shortly to intersect the lode. Bargain No. 6 is at present one of the most productive in the mine; it is fully five feet in width, with rich yellow and purple ores, very generally dispersed over the lode, which is estimated at present to return about five tons to the fathom of the average per sandage. Bargain No. 7 is a stope a few fathoms west of No. 6; the lode is in every way similar in character, but rather harder, and only four feet in width, but is equally rich in purple and yellow ores. Bargain No. 8 is on the same lode as No. 7. Bargain No. 9 is on a branch leading to shaft No. 1; it has lately widened itself, and is now about two feet; contains the same purple and yellow ores, and rendering about two and a half tons to the fathom average ore. We expect during the present month to break through into shaft No. 1, which will afford additional stopes to work upon. A premature thaw has set in, which we are afraid may interrupt our driving, and consequent returns in the smelting house for a period, we shall, however, await ourselves of every opportunity, with a view of keeping up regular supplies.

Wilson's.—You will have been prepared for a suspension of the workings on the north and south lodes, as we became inconvenienced with water rather earlier than usual, without any improvement to warrant the increased expenditure that necessarily would follow; we at once suspended, and are now proceeding with the adit level towards those lodes, under which it will come about three fathoms below the deepest working—consequently, will unwater the whole, and afford a cheap system for the transport of the produce. There are about twenty fathoms to drive, but it is in very cheap ground, so that here three to four fathoms per month can be driven, while there is a probability that other branches may be intersected, as the vicinity appears to be productive, in small unfavorable veins, which traverse each other in various directions. The north lode continues regular and copperous, although poor. The ore lode looks well kindly; it is very regular, varying from eighteen to twenty four inches in width, producing good fine-like ores, which fairly pay for breaking.

Ryans.—The adit level continues to develop characteristics favourably, although owing to the season of the year, and the obligation of working the productive stopes simultaneously with the opening of ground, it more rarely than would be the case had the necessity of breaking ore been less urgent; it is, however, highly satisfactory that the experience we have acquired warrants us in saying that they have assumed features of a permanency, which encourages us to expect that extensive and remunerating operations will soon follow; the several lodes described in a former account. In the vicinity have touched sufficiently to strengthen the opinion, and as soon as the cavities be sufficiently ventilated to admit of exploration, we shall discharge on the back to points of intersection, when new workings may be opened. One operation we are limited to two nearly parallel lodes situated within a few fathoms of each other; they are peculiar in character, varying in size from eighteen inches to four inches, quartz and copperous spar, with good yellow copper ores; the southern lode has, at this moment, a number of men full a fathom in width. At the bottom of these workings, which are about five fathoms in depth, a level has been commenced in a transverse direction towards the two lodes; one of which we calculate we shall be intersected at a distance of about five fathoms; within these few days a kindly branch has been successfully cut, about a foot in width, containing very good ores of a similar character to the adjoining lodes. On the northern lode the workings are less extensive, the depth not exceeding three fathoms, and about four fathoms be brought from the adjoining side of the mountain; we are driving a cavillon level to a transverse direction, which will cut both these lodes, and accurate them at a depth of eleven or twelve fathoms. We have this month again increased the number of our borguines, in order to profit as long as possible by the winter roads, particularly as next month our mining bargains generally will be reviewed, in order to provide people to unload the cutters, whose arrival may then be looked for.

United Mines.—Although several fathoms have been sunk since our last, owing to the disordered state of the ground, and following the branch we advised having cut, the inclination has been so slight as to have given but little in real depth.

Quarry.—Although our endeavours have been constantly directed to the opening ground on the main lodes, for reasons which have been already explained, our progress is but slow; we are, however, now in hopes that the lode extends into the mountain above, which rises rapidly to a considerable height; the situation of the lode is unique, as we may actually be said to be working from the bottom of it, instead of the top, as is usual. The lode was discovered at the extreme end of a projecting ledge, which inclined rapidly from a narrow mountain terrace, situated from 60 to 100 feet above; at the back of this again the mountain rises abruptly to about 1000 feet. We traced the lode for several fathoms on each side, from the extreme point of the ledge until the latter loses itself in the mountain. The lode ascends from this point at an angle of about 25°; we have, however, owing to the character of the overburthen, not been able to open it much above two fathoms—to that extent it presents a healthy appearance, being solid ore for about twelve inches, and from six to twelve inches calcareous spar. The moment the snow disappears we shall explore the surface above—in the meantime, as we have progressed up the mountain, the lode has assumed a more regular and encouraging character. The lode below is decidedly of a more regular description, with well defined walls, and nearly vertical dip, about two feet in width, but it is at present principally muudic, a small leader of copper pyrites being all that is worth taking away. Several indications of lodes have been discovered, which, as soon as practicable, will be investigated, and, we hope, lead to further profitable workings. A new lode has been discovered within these few days, which presents kindly indications, and is now under course of investigation. The branch in the inner stream is suspended until the summer.

Michell's.—We calculate this month's workings will get through the slate, and that McRea's lode will be met with, and, as these will be neither water nor heavy transport charges to contend with, profitable workings will most probably be opened. These lodes, owing to the superior character of the ore, and occasional rich bunches that have been met with, have always been a favourite working with the practical men. It was suspended solely in consequence of the heavy charges for water and drawing up the work, which the limited number of hargaines could not sustain; the rise, when completed, will remedy this.

C. ENGSTROM.

In conformity with my last report to Mr. Woodhill, I have visited this place, and, after having inspected as many of the branches of the establishment as the short time allowed me would admit, have made such arrangements for the prosecution of the miners during the coming summer as Messrs. Crowe and Engstrom considered necessary, and of which the latter gentleman will further inform you. The greater part of the second dredge having smelted during the winter, as a flux for the other ores, a small quantity of laitwane only remain for the summer dressing operations, and which will be easily returned with the stamps alone in about two months—consequently, the usual mining operations would be the only object for which my advices would be required during the summer, and as these will not be conducted with regularity before the coal vessels have been unloaded and dispatched, my presence during that time would, in a great measure, be superfluous. Any remarks that I might make on the mining department would merely be a reiteration of the above lengthy report; on the whole, however, I was much gratified to find the prospects so flattering, and more especially so in Quarry, where the discovery of so many new and promising lodes cannot but considerably augment the value of the establishment. My time would not admit of my visiting Raipas and Ryans; I have, however, spoken with the agents of those places, and, from their reports, I have every reason to believe the prospects to be equal to those of any former date.

S. H. THOMAS.

[Some additional particulars will be published next week.]

MANUFACTURE OF IRON—IMPORTANT IMPROVEMENT.

It is stated, in the *New York Tribune*, that a discovery has been made by Mr. Somers Brandenmore, of New York, in the manufacture of iron, by means of which the iron ore is by only one process converted into wrought-iron without being first made into pig-iron, and at a less expense than the pig-iron can be made. The iron ore is placed upon the floor of a reverberatory-furnace, the flame of the fire passing over it, when a chemical compound is used to unite the elements of the iron by separating the "slag" entirely from it. By this first and only operation, the wrought-iron comes out as perfect in every respect as that by the double operation of "puddling" and pilling pig-iron, and for the purpose of manufacturing steel, even surpasses it. By this process, wrought-iron of the best quality can be produced at a cost not exceeding $20-00 per ton. To make the iron ore into bulls of wrought-iron will require no blast, nor machinery of any kind; the anthracite or bituminous coals being used with equal advantage in a common air-furnace, a good draft being all that is wanting. These bulls of wrought-iron can be made with a good profit (if the furnace is built near the mines of mineral and coal) for $14 per ton. It is thought the immense advantages of this plan to the country at large cannot be computed—in the single article of railroad iron it will be a saving of millions of dollars to the United States; for, by statistical tables, we have already sent to England for that article alone, the sum of $32,000,000. We hope, therefore, to see many of our old rolling-mills, that are now lying idle throughout the country, in active operation, manufacturing this article; that machinery, which is capable of rolling out boiler plate iron, being sufficiently strong and efficient for all the purposes of railroad iron. The inventor says that with a capital of $100,000, forty tons of railroad iron can be manufactured every twenty-four hours. To our own State, this improvement may be a matter of great consideration. Pennsylvania is the richest State in the Union in mineral wealth, and especially in iron ore. No one has yet any conception of the vast upstream that will proceed in time from this inexhaustible source of wealth. With the rapid betterment of our country, the demand for iron must necessarily be immensely increased, and improvements calculated to facilitate the manufacture will invite renewed enterprise in this great branch of Pennsylvanian industry.—*Philadelphia Saturday Courier.*

MINE ACCIDENTS.

Pendlebury Gate Colliery.—We understand the damage done by the fire at this pit, noticed in last week's *Journal*, will cost about £600. The greatest credit is due to the proprietors, who have provided regular coals for the men while the necessary repairs are being made, which are expected to be performed in the course of next month.

Cleveland Colliery.—As a boy, named James Edwards, on Saturday last, was placing one of the miner's barrels in the skip, he he went to him from the shaft, his foot slipping, he fell into it, and was killed on the spot.

Upper Gornall.—On Monday, as William Brown was ascending the shaft, he fell out of the skip and was killed.

Victoria Pit, Newton.—An explosion took place at this colliery on Saturday last, through the incautious lighting of a candle in a spot where carbureted hydrogen had accumulated, by which E. Hurst and J. Foster were killed, and four others seriously injured.

Four Feet Pit, near Monmouth.—J. Hallowell died on the 17th ult. from the effects of injuries received on the 10th.

Low Pit, Hetton Colliery.—As W. Cowie was engaged, with four or five others, in repairing and altering the shaft of the pit, a quantity of earth and stones fell and killed him.

Wilson Pit, near Whitehaven.—As W. King was about to enter an old working in this pit, it fell, and seriously burned him.

Black Boyd Colliery, St. Helen's.—T. Leyland and W. Holland (aged two-by two and eleven years) were killed within three hours of each other by the falling in of a portion of the face of the coal or rock.

Wheal Gorry Mine.—As two men named Hamlin were at work in this mine, a hole exploded prematurely, killing one and severely injuring the other.

Sockburn Slate Quarry.—J. Hawken was killed on Wednesday week by the falling of a stone.—W. Pugh was seriously injured by falling over a precipice.

Broomage Colliery.—While S. Rowbottom was at work, a portion of the face fell and killed him on the spot.

MARSDEN'S PATENT KNIFE GRINDER AND POLISHER.—Independent

as any mention a machine for dressing knives as a subject for notice in a columbia Journal, we cannot our readers "Matthew's knife cleaner" is well worthy of notice, and accomplishes that necessary operation with rapidity and ease, without the slightest noise, or having a wretch upon the knife—so different to its results to the common knife-board, which mars the knife extremely, and is dirty and noisy in its operation. The following is a description of this simple, but useful, little machine:—A cast iron three shilling frame is fixed to a desk on which it stands; from the bar which forms the top, and which is held by the left hand to steady the machine, descends two strong bent steel springs, the ends of which are covered into two curved plates of iron, about fifteen inches long and two inches wide, which are thus kept in a continued position on their edges, and are pressed close together by the action of the springs. They are lined with leather, and are terminated off at the ends, forming a groove, in which is placed a polishing composition in powder which gradually works the way into the leathers. On inserting a knife between these two plates, and moving it backwards and forwards three or four times, it comes out thoroughly cleaned, both sides and back at once; and, if a new one, the polish is introduced—if old and scratched, a few rounds cleaning will gradually polish it. From the small size and portability of this machine, the rapidity of the operation, the cleaner from dirt and noise (no fish, bottle origin), to its occupancy, by reason of the immediate vicinity of the dining table), the essential desire to watch the fashion and keep in doing it, and the saving, we have no doubt this effective and simple invention will meet this object general use. There is an error of it which we were on, but the inventor, and they can be explained for a few pence.

MEETINGS OF SCIENTIFIC BODIES.

IN THE ENSUING WEEK.

SOCIETY.	PLACE OF MEETING.	DAY.	HOUR.
Statistical	15, Regent-street	Monday	8 P.M.
Asiatic	16, Grosvenor-street	Monday	8 P.M.
Chemical	Society of Arts, Adelphi	Monday	8 P.M.
Medical	Bolt-court, Fleet-street	Monday	8 P.M.
Civil Engineers	25, Great George-street	Tuesday	8 P.M.
Society of Arts	Adelphi	Wednesday	8 P.M.
Pharmaceutical	17, Bloomsbury-square	Wednesday	8 P.M.
Ethnological	——	Wednesday	8 P.M.
Royal	Somerset House	Thursday	8½ P.M.
Antiquaries	Somerset House	Thursday	8 P.M.
Society of Literature	St. Martin's-place	Thursday	4 P.M.
Medico Botanical	32, Bedford-square	Thursday	8 P.M.
Numismatic Society	4, Tavistock-street	Thursday	7 P.M.
Royal Institution	Albemarle-street	Friday	9½ P.M.
Philological	49, Pall Mall	Friday	8 P.M.
Linnæan	Soho-square	Friday	8 P.M.
Royal Botanical	Regent's park	Saturday	4 P.M.
Mathematical	Crispin-street, Spitalfields	Saturday	8 P.M.

CURRENT PRICES OF STOCKS AND SHARES.

STOCK EXCHANGE, Saturday morning, Twelve o'clock.

Consols Money, 90⅛
Consols Acc. ann. 90⅛
3 per Cents. 1818
Reduced 3 per Cents. 90⅝
Reduced 3½ per Cents. 100⅛
Long Annuities, 13⅛
Bank Stock, 191
Exchequer Bills, 47 60 pm.
Bengal Bonds, 5 per Ct., 102
Brazil, 5 per Cent., 80 81

Spanish, 5 per Cent., 27
Dutch, 2½ per Cents., 66⅝
Ditto, 4 per Cent., 100
Portuguese, Conv., 5 per Cent., 36
Russian, 5 per Cent., 112
Spanish Actives, 5 per Cent., 23
Ditto, 5 per Cent., 23
Chili, 6 per Cent., 102
Colombian, 6 per Cent., 14
Mexican, 5 per Cent., 20

[From our own correspondents.]

LATEST PRICES OF IRISH STOCKS.—5 per Cent. Consols, 90⅛; to 90⅝; 3½ per Cents., 1818, ditto New, 100, 101; 4½ per Cent. Debentures, 96; Bank Stock, 218½.—Kings-town Railway, 14½; Dublin and Drogheda, 71½.—Hibernian Bank, 31½; Royal Bank, 113½; Provincial Bank, 96.—City of Dublin Steam Co., 5 to 6 dis.; Hall, 10½, &c.; British and Irish Ditto, 5½.—Dream Ship Building Company, 10½.—National Insurance Company, 8½; Patriotic, 4½.—Mining Company of Ireland, 13½; Wicklow Copper Mines, 20½.

CURRENT PRICES AT LIVERPOOL.—THURSDAY EVENING.

Stock.	Closing pr.	Gain.	Stock.	Closing pr.	Gain.
Warrington & Preston	4	4½	—	London and Brighton 4 per Cent.	84½	4½
Birmingham & Derby	62	62	—	London and Croydon	18½	19	—
Reading & Gloucester	25	25	—	Lond. Edinb. & Western	60	60	65½
Bolton and Preston	30	30½	—	Manch. & Birmingham	17	18	19
Bristol and Exeter	77	77	—	Manch. Sheff. & Derby	111	—	—
Bristol & Gloucester	60½	60½	—	Manchester & Leeds	107	108	—
Caledonia	4	4½	4½	Midland Counties	89	91	—
Chester & Birkenhead	10½	3	3½	Newcastle and Carlisle	42	42	—
Chester & Holyhead	8½	8½	—	Newcastle & Darlington	60	61	—
Dublin and Cashel	61	62	—	North British	32	33	—
Dublin & Drogheda	70	72	—	North Midland	90½	91	—
Eastern Counties	12½	13½	1½	North Union	1 9	1 10	—
Edinburgh & Glasgow	60	60	60½	Norwich & Brandon	8	9	—
Edinburgh & Hawkhead	11½	11½	—	Paris and Lyons	8	8½	7½
Glasgow & Greenock	11	11½	—	Paris & Orleans	8½	8½	—
Glasgow Paisley & Ayr	16½	16½	—	Paris & Rouen	17½	18	—
Great Southern	100	101	101	Paris and Strasburg	15	15	15
Gt. North of England	99	99	—	Rouen & Havre	16½	17	—
Great Western	117	118	—	Strasburg and Basle	5½	6	—
Harrowgate & Knaresb.	0	0	—	St. Helens & Runcorn G.	19	19	—
Norfolk	12	13	13	Stockton & Hartlepool	70	80	—
Hull and Selby	86½	87	—	South Eastern	20	20½	—
Lancaster and Carlisle	74	7	—	Trent Valley	24	24	10½
Lancaster & Preston	20	20½	—	Ulster	50	50½	—
Liverp. & Manchester	24	25	—	York & N. Midland	117	118	—
London & Birmingham	21	22½	—	Royal Bk. of Liverpool	700	700	—

16, Castle-street and Stock Exchange, Liverpool. JOHN GRAVES.

LEEDS, THURSDAY.—The fear of competing lines is again browning the minds of those who hold shares in the Midland Counties lines amalgamated at Derby, and in the York and North Midland; especially is this apparent in the stock of the latter, which has again fallen from 121 to 120, at which latter rate it was sold on Monday in London. We think this fear rests on very weak foundations, for reasons that we have urged more than once in our communications to the *Mining Journal*; and to those communications we beg to refer—as the more we think of their correctness, the more are we confirmed that we are right in our conclusions. It is quite apparent to us that North Midland shares are cheapest at 90 than York and North Midland at 120, as the former would pay the same 5 per cent. this year, and the latter little more than 4 per cent.; and, as the Newcastle and Darlington, when opened, on the 24th of June (a consolation ray in the history of England), will benefit the York and North Midland, as well as benefit the North Midland.—Manchester and Leeds shares are droopingly at 81. The prospects of this line, from competing lines in embryo, are anything but agreeable to the shareholders. Two new lines are just launched, both of them affecting the Manchester and Leeds, in prospect; the one is a line from Leeds to Dewsbury (in connection, probably, with the Hull and Leeds project), thus shortening the distance from Leeds to Manchester full ten miles, and the distance from Leeds to Manchester about seventeen miles—a leg to the newly projected road from Huddersfield to Wakefield, by the Midland route from London. Such are the results of that spirit of competition now so rife in the country, in projecting new and important routes of communication—nothing, to a room, the public are adopted until before last—that "Railways must progress." An extension of the Manchester, Bury, and Rossendale line, from Clark-lane to Burnley, by Accrington—thence to Keighley, to meet the long Bradford—or to Shipley, meeting the same road; all these movements must affect the shares of the Manchester and Leeds, to a temporary rest, although not permanently so, we suppose into thinking.—The Whitby people to a remarkable degree for the harvest, which, it is more not used, would give a further stimulus to the home trade this season; and, perhaps might also add to our foreign trade—as that increased receipts on the railways, which are quite apparent along the road lately, may continue as good, in consequence, during the latter part of the year, as they have been during the first.—All our correspondents of late tend to give increased confidence to those who wish to railway purchases; and they are likely to occur before the autumn is over.—Lincoln shares, after being so high as 12½, have receded, and are now at 11½. Lincoln shares, after being so high as 12½, have receded, and are now at 11½. Lincoln shares, after going to 6½, have retreated to 7½.—Under the Chancellor's charge, we may calculate on the reasonable prices of 6 to 7, here at least three, the "length of thousand," and even 8½ to 9 on whatever are their prospects to the probability of a name of an amalgamation with the South Eastern.—Shares in the South Eastern still continue to rise on, and not for all; the next day of the South Eastern to be decided in the end of May, augurs anything but good to our eyes.—Subjoined are our latest quotations:—

Norfolk	London and South Western
Birmingham and Derby	London and Croydon
Hull and Selby	Manchester and Leeds
Eastern Counties	Manchester and Birmingham
Ditto, new	Midland Counties
York and N. Midland	Norwich and Brandon
Lancaster and Carlisle	Newcastle and Darlington
London and Brighton	York, New and Eastern
London and Greenwich	Ditto, Midland
London and Blackwall	North Eastern and Hornsey
London and Birmingham	Yarmouth and Norwich
London and Westminster	York and North Midland

SPAIN, FERNANDO.—There has not been an much inquiry for any of the railway shares during the past week, save for those Mexicans, which are particularly strong and much sought after. The shares of one or two of the new lines have been advertised enquired for, and advertised, and of persons which appears favourable for their progress, next to no sales might accept. Bank, canal, and several miscellaneous shares remain as before. The latest quotations are as follows:—Brewing Bank, 6 to 7 sellers; Gateshead and Glasgow, 4 to 5 sellers; Great North of England, 5 to 6; Hull & Selby, 10½ to 11½; Leeds and Selby, 10½ to 11½; London and Birmingham, 20½; Liverpool and Manchester, 24 to 25; London and Brighton, 19½; North and East Lands, 10½ to 11; Oriental Chemical, 6 to 7; Provincial and Patriotic, 4½; Shropshire & Severn, 4½; South England, 5½; Worcester and Hereford, 5 to 6; South Eastern, 6½; York and North Midland, 11½.—Star Steam Ship Company, 7½.—Shell Shell Company, 10½; Shell Iron, 15½ to 16½; Shell Plate and Ribbon Mills, 10½.

EDINBURGH, THURSDAY.—Yesterday's Stock Book, 191; North of England, 99½; Newcastle, Shields, and Tynemouth and Union, 19½; Northumberland and Durham District, 19½; Newcastle Commercial, 9½; Newcastle Joint-Stock, 9½; Newcastle and Berwick Vicinity, 9½; Darlington Union, 9½; Carlisle City and Dis. trict, 9½; Lancaster and Carlisle, 9½; Oriental and Occidental Railway, 6½; Reading Junction, 6½; 9 Queen's and North Shields, 9½; Newcastle and Carlisle, 9½; Wickham and Darlington, 6½; Hartlepool Dock and Railway, 10½; Great South of England Dock Company, 9½; Glamorgan and Monmouth, 9½; Monmouthshire Canal Company, 9½; Aberdare Canal, 9½; Glamorganshire Canal, 9½; Monmouthshire Railway and Canal Company, 9½; Newport Dock Company, 9½; Swansea Harbour Company, 9½; Swansea Improvement and Railway, 9½; Taff Vale Railway, 9½; Rhondda and Swansea Bay Railway, 9½; Cardiff Railway, 9½; Penarth Harbour, Dock, and Railway, 9½; Bute Docks, 9½; Cardiff Docks, 9½; Taff Vale Extension, 9½; Rhymney Railway